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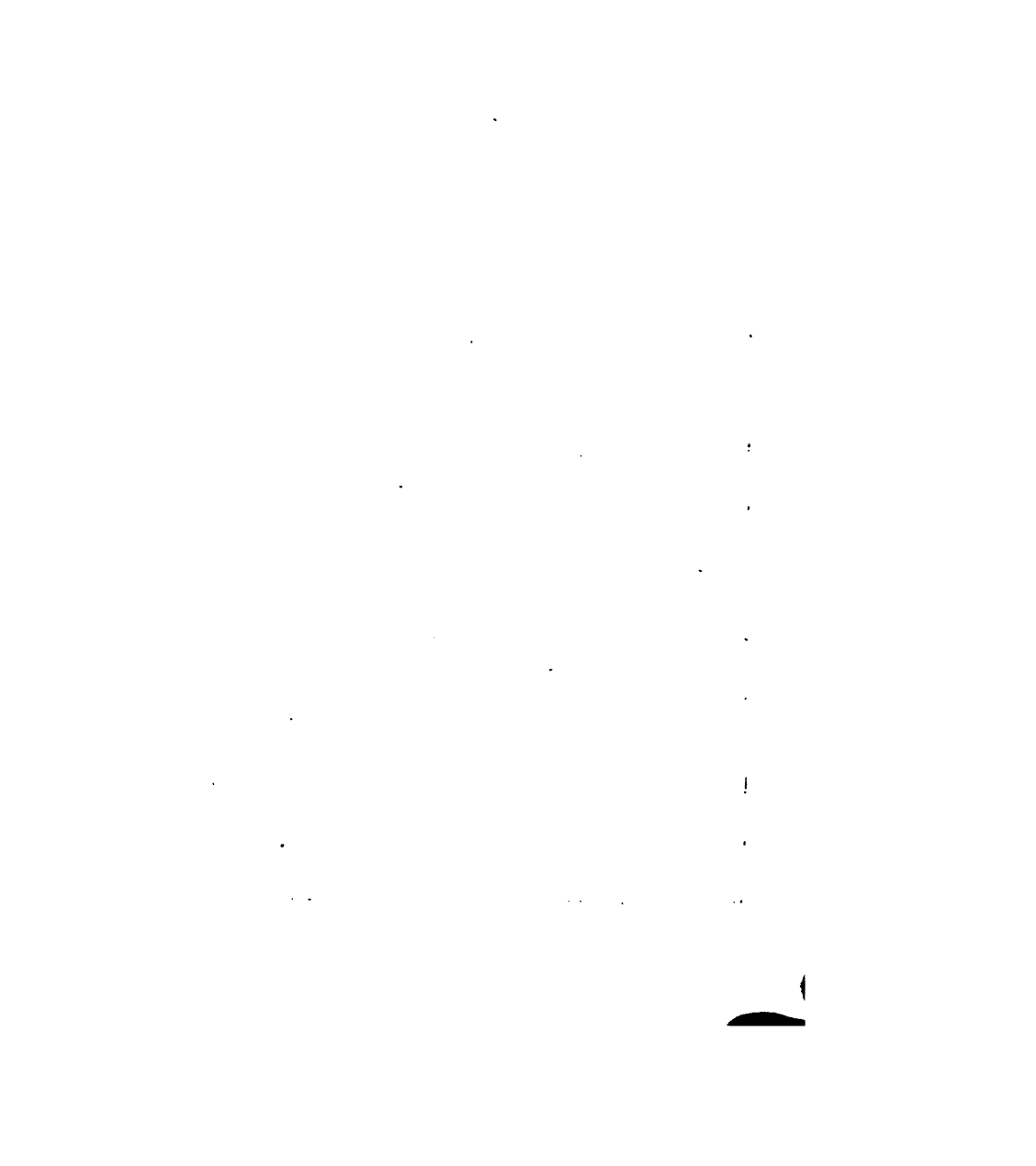
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HUMAN EMBRYO, AT THE TWELFTH WEEK, ENCLOSED IN THE AMNION.
NATURAL SIZE.

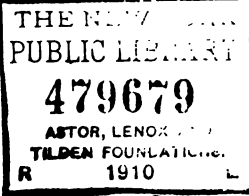
A DOCTOR'S TALK
WITH
MAIDEN, WIFE, AND MOTHER

BY
G. L. AUSTIN, M.D.

WITH RECOMMENDATORY LETTERS FROM
MRS. MARY A. LIVERMORE
AND
MISS FRANCES E. WILLARD

*"To say what should be said, to say only what should be said,
and to say it as it should be said."*—ARISTOTLE.

BOSTON
LOTHROP, LEE & SHEPARD CO.



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By G. L. AUSTIN, M.D.

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Melrose, July 19,

I have read
Dr. Austin's book thoroughly.
Have re-read some portions. It is
an improvement on any of the
books for women that I have
read - and I am familiar with
all that have been published
in my day. And this seems to me
its characteristic excellence; while
it speaks plainly and warningly
of the perils which encompass the
path of woman, both physically
and mentally, when she violates
the laws of her being, it does not

start out with the monstrous assumption that woman is a natural invalid. Nor does it give directions, that followed, would tend to, make and keep her so.

It was from this false standpoint that the impertinent book of Dr. E. F. Clarke was written as also the sentimental one of Michelet, and others of the same sort. They have done no end of mischief - whirling down the wakers on the wheels of progress for woman.

Dr. Austin's book is full of hope, and will prove as powerful a tonic to young women of ambition and promise, as those

of Clarke, Michalet & Co., have
proved discouraging and en-
feebling. Before them lies health
and vigor, and the enjoyment and
usefulness coming from both - if
they will acquaint themselves
with the laws of their being,
and will obey them.

I am especially thankful
for Dr. Austin's disparaging
words concerning ~~the~~ the unclean
army of "gynecologists," who seem
desirous to convince women
that they possess but one set of
organs - and that these are al-
ways diseased. I regard these
specialists as a pestiferous set.

And the bare mention of them
is the same in its effect upon
me, as a red rag to a bull.

I do not see how the most
prudent can be moved to blas-
phemous thoughts by this book or
its plates. Not knowing its au-
thor, I read from the reading of
his book with the conviction
that he is a clean man. It is
a profanation for some to dis-
cuss these topics - but I have
not experienced one emotion of
revolt against Dr. Austin's
treatment of them. I will bring
you the sheets of the book when
I next go to Boston.

Yrs. truly
Mary A. Livermore

For Sale and Rent and Notice Sent.

WOMAN'S NATIONAL CHRISTIAN TEMPERANCE UNION.

Pres. Mrs. FRANCES E. WILLARD, BOSTON, MA. Office 16 Court 14th St., New York.
Cor. Sec. Mrs. CAROLINE E. BULL.
Rec. Sec. Mrs. MARY A. WOODBRIDGE.
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Treas. Mrs. ESTHER FORD.

My dear Mrs. Shepard:

The letter of

Mrs. Livermore so admirably covers the ground that any added commentary seems quite superfluous. "Perils of American Women" is a book of this age - while this treatises it is destined to replace are largely medieval.

The Scientific Spirit of the 19th Century breathes in these forceful pages and I wish every mother and sister daughter and wife of my acquaintance knew this book by heart.

Yours sincerely, Frances Willard.

PREFACE.

THIS little work really needs no words of introduction: it will speak for itself. In its preparation I have endeavored to keep constantly before my mind the well-known maxim of Aristotle, "to say what should be said, to say only what should be said, and to say it as it should be said."

The subjects treated of in the book are all important at the present time, albeit that they are of a delicate nature. It is getting to be a very serious question with the medical profession, "What is the matter with American women?" I cannot hope to have fully answered it; but possibly I have herein thrown out some suggestions which may prove of value to those whom they most intimately concern.

I shall be pleased to receive any word, by way

of criticism or otherwise, from my readers. All communications should be addressed to the care of my publishers.

G. L. A.

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A DOCTOR'S TALK WITH MAIDEN, WIFE, AND MOTHER.

CHAPTER I.

THE FEMALE ORGANS OF GENERATION.

AN accurate knowledge of certain points in the anatomy of the female organs of generation is essential to the comprehension of the most important of the processes of reproduction. Following a fruitful intercourse of the sexes, the function, as regards the male, ceases with the comparatively simple process of penetration of the male element through the protective covering of the ovum, and its fusion with the female element. The fecundated ovum then passes through certain changes, which are the first processes of its development, forms its attachments to the body of the mother, continues its development, materials being derived from the mother, is nourished, and grows, until the foetus at term is brought into the world.

An exact knowledge of the mechanism of these interesting but complicated processes can be ob-

tained only after a study, as we have said, of the anatomy of the female organs. We must know precisely how the ovum is developed in the ovary, and how it is discharged; how, after leaving the ovary, it passes into the uterus, and, if fecundated, forms its attachments to the uterus.

Before we proceed to study the structure of any of the female organs, it is important to have a clear idea of the general arrangement and the relations of the several parts; and in this study we must carefully distinguish between those parts which are external, and those which are internal, and are lodged within the pelvis.

By glancing now at the accompanying illustration (Fig. 1), a rounded eminence just in front of the pubes will be seen. This is the *Mons Veneris*, — a fatty cushion, as it were, and in the adult always abundantly supplied with hair.

Extending downwards from the *Mons Veneris* on either side are two longitudinal, slightly curved, and rounded folds of tissue, thicker in front than behind, and joined together at each extremity, forming what are called the *anterior* or forward, and *posterior* or backward, *commissures*. These folds constitute the *labia majora*. The interval left between the posterior commissure and the margin of the anus is about one inch in length, and is known as the *perinæum*. Like the *Mons Veneris*,



Fig. 1.—SECTION THROUGH THE FEMALE PELVIS.

1, Rectum; 2, Uterus; 5, Bladder; 6, Clitoris; 7, Urethra; 8, Symphysis pubis; 10, Vagina.



the labia majora are covered with hair. The purpose of these "larger lips" is, by acting as a sort of valve, to close the orifice of the vagina, whence the term "vulva;" that is, *valva*, the "folding-door" of the ancients.

Just within the posterior commissure is a small transverse fold, the *fourchette*, which is commonly torn in the first parturition.

The *labia minora* are two small, moist folds of mucous membrane, situated within the labia majora, with which they are continuous externally. They contain a network of vessels in their interior, and secrete an abundance of sebaceous matter. The labia minora are also sometimes termed the *nymphæ*.

Situated just beneath the so-called anterior commissure, is a small elongated body, which is partially hidden from sight between the anterior extremities of the labia minora. This is the *clitoris*, usually regarded as the seat of voluptuous sensations. Between the clitoris and the entrance of the vagina is a triangle-shaped and smooth surface, bounded on each side by the labia minora: it is known as the *vestibule*. At the back part of the vestibule, and about an inch below the clitoris, is the *meatus urethrae*. Below this urinary orifice is the opening of the vagina, which, however, is more or less closed in the virgin by a membranous fold termed the *hymen*.



The hymen is a thin, semi-lunar fold of mucous membrane, usually of a crescentic shape, with its concave border looking toward the urethral orifice ; so that a small opening is left anteriorly for the escape of the menstrual fluid. It was formerly believed that the presence of the hymen, intact, furnished a test of virginity. This is not necessarily the case : for an unlacerated hyphen may exist after sexual intercourse ; and, on the other hand, the fold may be, and often is, ruptured by other causes.

On each side of the commencement of the vagina is an oblong body, of a reddish-yellow color, and of the size of a pea. It is called the *gland of Bartholine*. These glands secrete a yellowish adhesive fluid, which is poured out freely during coition, and preparatory to the passage of the child at the time of labor, and serves to protect the mucous surfaces, by rendering them soft and slippery, from mechanical injury. An abundant secretion is likewise caused by erotic dreams, or by any form of sexual excitement. In old age, it has been noticed, the glands seem to disappear altogether.

The *vagina* is a membranous canal connecting the uterus with the external parts of generation. It is situated behind the bladder, and in front of the rectum ; in direction, is curved forwards and downwards ; in shape, is cylindrical, flattened from before backwards ; and its walls are ordinarily in

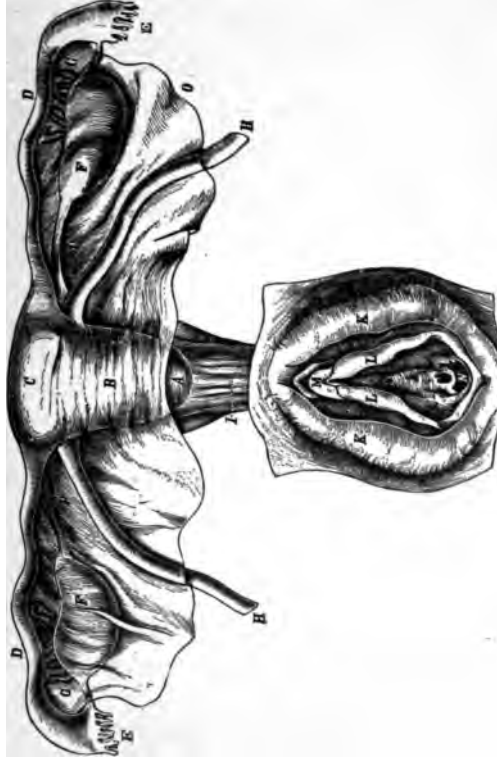


Fig. 2.

A, Vaginal portion; B, Corpus uteri; C, Fundus; D, Fallopian tubes; F, Ovaries; H, Round ligaments; I, Vagina; K, Labia majora; L, Labia minora; M, Clitoris; N, Hymen.



contact with each other. The length of the vagina, on the average, is two and a half inches for the anterior, and a little over three inches for the posterior wall. At its aperture the vagina is very much constricted, but becomes more and more dilated as it nears its uterine extremity. It is commonly supposed that there are secreting glands in the vagina ; but such is not the fact. Nevertheless, the vagina is covered, even in periods of repose, with a thin layer of acid mucus, which under sexual excitement, and during menstruation and pregnancy, is very largely increased in amount.

Projecting into the vagina, at its upper extremity, is the lower part of the *cervix uteri*, or neck of the uterus. As the uterus is the organ of gestation, we may enter more into particulars in regard to it.

In the virgin, the *uterus*, or womb, is shaped like an inverted pear, is flattened from before backwards, and is situated in the cavity of the pelvis, between the bladder and rectum. Its average length is about two and a half inches, though its dimensions vary. By a well-defined constriction, the uterus is divided into two parts of nearly equal length. The upper, larger portion is at its upper border about one and a half inches in width ; the lower portion has a spindle shape, and measures about half an inch in its widest diameter. This

lower portion is termed the *cervix*, or "neck;" the part comprised between the neck and the Fallopian tubes is called the *corpus*, or "body;" and the segment just above is the *fundus*, or "base."

The uterus is held in position by ligaments, certain of which are formed of folds of the peritoneum. What are termed the *broad ligaments*, which extend from the sides of the uterus to the walls of the pelvis, are the most interesting of all, as they lodge the ovaries and the Fallopian tubes.

When cut in halves lengthwise, the uterus presents a cavity of triangular shape with convex borders. The two upper angles (Fig. 3) communicate by a small opening, hardly large enough to admit a fine sewing-needle, with the canal of the Fallopian tubes. At the lower angle is a circular orifice, about one-sixteenth of an inch in diameter, which forms the internal anatomical limit between the body and the neck of the uterus. The canal of the neck has a fusiform shape, and is included between the circular orifice already mentioned and the external orifice, — the *os*, or "mouth of the womb." At the period of puberty the uterus weighs about one ounce and a half; after parturition, from two to three ounces; and at the ninth month of gestation, from two to four pounds.

The *Fallopian tubes*, so called, are properly integral portions of the uterus. They are included

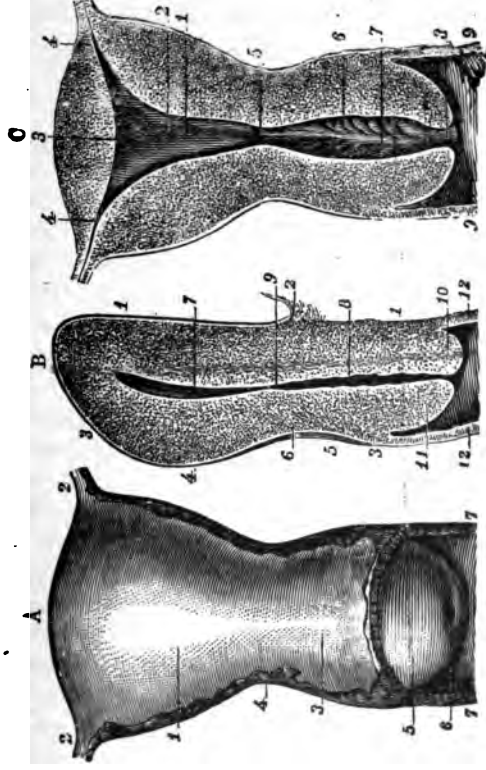


Fig. 3. — THE VIRGIN UTERUS.

A, Front View; 1, Body; 2, 2, Angles; 3, Cervix; 4, Site of the Os Internum; 5, Vaginal portion of the Cervix; 6, External Os; 7, 7, Vagina; B shows a Median Section of the Uterus, and C, a Transverse Section.

between the folds of the broad ligament at its upper border, and measure from three to four inches in length. As they pass outward from the uterus they follow a winding course, and gradually increase in width and thickness.

The *ovaries* are two flattened, nearly ovoid, bodies situated between the layers of the broad ligament, — in length from one to one and a half inches, in breadth from three-quarters of an inch to an inch, and from a third to a half-inch in thickness. The inner extremity of each ovary is somewhat pointed, and is attached to the side of the uterus by means of the "ligament" of the ovary; the outer extremity is rounded, and is attached to one of the fringes of the Fallopian tube. Externally each ovary is surrounded by a fibrous coating, beneath which is a substance soft, spongy, and of reddish color; internally is the loose connective tissue, composed largely of round and spindle-shaped cells, which originate the ova.

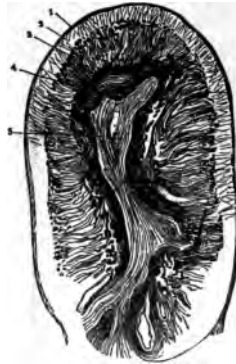


Fig. 4. — LONGITUDINAL SECTION OF OVARY FROM A PERSON AGED EIGHTEEN.

It is magnified to *eight* diameters.

It need scarcely be said, that all the organs of generation above named, especially the uterus, Fallopian tubes, and the ovaries, are each amply supplied with veins and arteries and nerves.

The bladder is in relation with the pubes in front, with the uterus behind, from which it is usually separated by a convolution of the small intestine, and with the neck of the uterus and vagina beneath. The form of the female bladder corresponds with that of the pelvis, being broad from side to side, and often bulging more on one side than on the other: especially is this the case after childbirth.

The *urethra* is the tube which conveys the urine from the bladder. It is about an inch and a half in length, is lodged in the upper and front wall of the vagina, in its course downwards and forwards, beneath the arch of the pubes, to the *meatus*.

Mention must also be made of the *mammary glands*, or breasts, which are located in the pectoral region. The left breast is generally a little larger than the right. Near the centre of each mamma is a small prominence of the integument, or outer covering, called the *nipple*, which is surrounded by an *areola* having a colored tint. In females of fair complexion, before conception has taken place, the color of the areola is a delicate pink; after impregnation it enlarges, and assumes

a brownish hue, which deepens in color as pregnancy advances ; and after the birth of a child the brownish tint continues through life.

The areola is furnished with a number of *sebaceous glands*, which secrete a peculiar fatty substance for the protection of the delicate integument around the nipple. During suckling, these glands increase in size, and have the appearance of small pimples projecting from the skin. At this period they serve by their secretion to defend the nipple and areola from the excoriating action of the mouth of the infant.

Each breast consists of what are called *lobes*, *little lobes*, and *gland-vesicles*. The last-named are about one two-hundredth of an inch in diameter, and communicate with an excretory duct, which, with the excretory ducts of all the smaller lobes, unite to form a common duct, or canal, for each of the larger lobes. This is called the *galactophorus*, or "milk-bearing," *duct*. There are from fifteen to twenty-five such ducts in each nipple.

The secretion of milk is effected by the formation of oil-globules in the so-called "epithelial" cells of the gland-vesicles. By undergoing a change at the proper time, the oil-globules become *milk-globules*, and are suspended in a fluid, the whole constituting *milk*. Previous to conception the breasts only secrete a yellowish, sticky

mucus ; and at the commencement of the nursing period the milk is imperfect, and is termed "colostrum."

After the child-bearing epoch the breasts waste away, or degenerate from their glandular tissue into mere cushions of fat.

CHAPTER II.

THE ORIGIN OF THE OVUM ; MENSTRUATION.

DURING infancy and childhood the organs which have been described in the preceding chapter remain undeveloped, though subject to more or less growth. At a certain period of life — usually between the age of thirteen and of fifteen years — a girl undergoes a remarkable change, and arrives at what is termed the “age of puberty.” At this time there is a more rapid increase in the development of the whole body: the limbs become fuller and more rounded; hair makes its appearance upon the Mons Veneris; the glands of the breasts increase in size, and take on a new stage of development; and in the ovaries and the uterus phenomena of a novel and surprising character manifest themselves to the young female for the first time. It will be noticed, also, that in the moral, as well as in the physical, attributes of the person, certain changes are going on. She herself becomes conscious of a capacity for new functions, with an indescribable change in feeling for the opposite sex, due to the first development of sexual instincts.

From this moment the girl has entered upon the period of early womanhood, has become capable of impregnation, and of renewing her species, and will continue so, in the absence of diseased conditions, until the cessation of the menses.

The foregoing remarks lead us now to a very complicated and poorly understood subject, to even mention which sounds frightfully scientific, and therefore uninteresting to many readers. We allude to the process of *menstruation*, and the origin, growth, and passage of the *ovum*. In most books of a popular character, intended chiefly for the instruction of females, little or nothing is said in regard to these two great themes; and this neglect accounts probably for the fact, that of few subjects are women, in general, more strikingly ignorant, and yet, withal, anxious to know all. For this reason, and because, further, no feature relative to the inner life of woman is more remarkable and important in its results than that of *ovulation*, we purpose to devote the space of this chapter to it.

First, we have to deal with the process of ovulation. What is it, and whence comes, and how develops the *ovum*, or egg? We must go back to our description of the ovary, and, to what has already been stated, add that near the surface of *each ovary are found* a number of vesicles, termed

Graafian vesicles, or "ovisacs." Each of these vesicles, which, of course, are of infinitely small size, consists of an external membrane and fluid contents. The membrane is composed of two coats, the inner one of which forms a uniform lining to the ovisac, excepting on the side nearest the surface of the ovary, where cells are accumulated into a small eminence. This eminence contains a minute, globular, nucleated vesicle, called the *ovum*.

The size of the ripe or fully developed ovum in the human subject is about one one-hundred and twenty-fifth of an inch, and its form is globular. Its external covering is perfectly clear, apparently structureless, quite strong and resisting, but very, very thin. As it forms a transparent ring in the mass of cells in which the ovum is embedded, this covering is sometimes termed the *zona pellucida*, or "transparent belt," but more properly the *vitelline membrane*. Within this covering, or envelope, is the *vitellus*, or yolk, which is composed of a semi-fluid mass, containing a large number of very fine granules and globular vesicles. The nucleus of the ovum is an enlarged clear, colorless vesicle, known as the *germinative vesicle*; and within this vesicle is a dark, solid body, which is known as the *germinative spot*. A reference to the accompanying illustration (Fig. 5) will serve to render the description more readily understood.

It has been estimated by careful observers that each ovary contains about thirty-six thousand Graafian vesicles, or ovisacs. Not all these vesicles arrive simultaneously at the same degree of development, nor do they contain all their *ova* in a state of maturity. Though, in a great measure, the formation of the ovisacs is completed during the antenatal period of existence, they remain, previous to puberty, in a quiescent condition, and not until this time do they assume any functional importance.

At the commencement of the period of puberty, or, more correctly, at each menstrual period, one or two of the Graafian vesicles, or ovisacs, are perfectly developed. One of them, usually that next the surface of the ovary, is swollen, its contents augment, and it becomes more marked: that portion of its wall nearest the surface of the ovary presses against this surface. Just at this point occurs an arrest of nutrition, and consumption of its own walls; and this condition, assisted by an increasing swelling of the central portion of the ovary, readily brings about a rupture of such a nature that the contents of the ovisac escape, and, with the liquid, the ovum is expelled. We may remark, in passing, that this is the most favorable moment for fecundation of the ovum.

After the expulsion of most of its contents, the

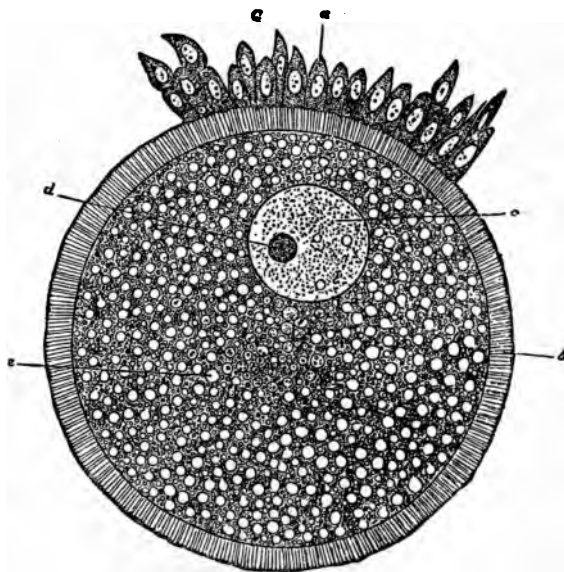


Fig. 5. — OVUM TAKEN FROM A GRAAFIAN FOLLICLE IN THE RABBIT.
a, Epithelium of the Ovum; *b*, Zona Radiata; *c*, Germinative Vesicle;
d, Germinative spot; *e*, Vitellus.



Graafian vesicle closes again, and undergoes a sort of healing process, leaving but a slight trace of its rupture.

The ovum, thus expelled from the ovary, then falls outside that organ. In the great majority of instances it passes directly into the Fallopian tube, or oviduct. It may fall into the peritoneum and there disappear, and, in case of fecundation, may there undergo a development ("peritoneal pregnancy"); but this is not the normal course. As soon as the ovum reaches the tube it is at once passed along into the uterus, where it sets in action certain phenomena if the ovum has been fecundated, or, if it is non-fertilized, it is thrown off with the menstrual flow.

The descent of the ovum coincides almost exactly with the "menstrual" period, — every twenty-eight days on the average. The expulsion of the egg, consequently, is periodical. This phenomenon is accompanied by a congestion of the spinal cord, pain in the lower part of the back, and certain uterine phenomena, known as *menstrual hemorrhage*, or *catamenial flow*.

In some girls, near the time of puberty, a periodical mucous-like discharge from the genital organs precedes for a few months the regular establishment of the menstrual flow. Sometimes also, after the first discharge of blood, the girl passes

several months without another period, when the second flow takes place, and the menses then become regular. As already stated, the periods, in a condition of health, recur every twenty-eight days on the average, until they cease finally at what is termed the change of life.

A menstrual period usually presents three stages, — first, beginning ; second, a bloody discharge ; third, cessation.

The first stage is variable ; but usually a feeling of weariness, a sense of fulness and weight in the pelvic region, a slight enlargement of the breasts, and occasionally some headache and backache, precede the onset of the flow. The moment the blood appears, all the foregoing general symptoms abate. During the second stage the blood exudes from the vagina in variable quantity, and continues to flow for from three to five days, or even longer. On the first day the discharge is slight, on the second and third it is at its height, and on the succeeding days the quantity is gradually diminished. The third stage — that of cessation — is very simple, and requires no explanation.

The question is often asked, and can be answered by comparatively few women, — Whence comes this blood? We will endeavor to give the latest opinion on this point, and, we may remark also, the right *one, and say nothing* of the many strange and

absurd explanations which, in an earlier time, have prevailed.

The uterus, as we have seen, presents a cavity which is lined with a mucous surface. This surface is really only very thin epithelium, and is closely attached to the muscular element of the womb. Once a month this epithelium is subjected to a sort of periodical *moulting*; that is, the elements entering into its structure, including the blood-vessels, degenerate, and a hemorrhage takes place. A short time after the flow has ceased, the mucous membrane returns to its ordinary condition. Thus, though the hemorrhage would seem to be the most important phenomenon, it is none the less true that the very essence of menstruation is an epithelial moulting, sympathetic and usually simultaneous with the epithelial development in the ovary, and whence results the shedding of the ovum, or ovulation.

During the phenomenon of menstruation the mucous lining of the vagina and of the neck of the uterus also undergo a certain amount of desquamation. If disease is present, this desquamation is permanent, and forms a white or yellowish discharge, commonly known as "whites," or *leucorrhæa*, from the vagina, and especially from the neck of the uterus.

Much more might be written on the twofold

subject of the present chapter ; but enough for our purpose has already been given, and, we trust also, in such a light and with sufficient clearness to make it seem important to every reader. From a spurious idea of modesty, from indifference, or from even pure carelessness, a great many mothers permit their daughters to arrive at the age of puberty without the faintest intimation as to what they may hope to experience. No word, no counsel, is extended to the young innocent, who, at the appearance of the unexpected menstrual period, is too often affrighted at the sight of flowing blood, and, in her alarm, recklessly endeavors by all the means at her command to arrest it. To the knowing female the period is ordinarily one of great anxiety ; but how much more intolerable must it be to one whose youth is fraught with ignorance of this first and fundamental law of her womanly nature, and who, if she have a mother, dares not to ask for a little light on the matter ?

Finally, it must not be forgotten that imprudence during a menstrual period is a most prolific source of disease. "Some women," we quote from Dr. Thomas, "through ignorance, many through recklessness, and a few from necessity, go out lightly clad in the most inclement weather during this *period*, and many suffer in consequence from violent *congestive dysmenorrhœa*, and often from inflamma-

tion of the uterus." Rest for the body and the mind, and no exposure to cold and moisture, are safe rules commonly neglected by women during the days of menstruation. In evidence of the fact, thousands of delicate and refined women may be found walking the streets on stormy days, or, scantily clad, whirling around in the ball-room, or thronging the skating-ponds of our public parks, at just the moment when a knowledge of their danger, if not their own good common sense, should prompt them to be at home.

CHAPTER III.

THE RELATIONS BETWEEN LOVE AND MARRIAGE.

WITH the first manifestation of the female sexual instincts, as we have seen, there ensues an indescribable change in feeling for the opposite sex. It is then that love begins to dawn,—that form of love which constitutes the foundation of human nature, which is the motor power of all action and the principal of all the passions. As it exists between the boy and the girl, it is an attraction towards the beautiful, the good, and the true ; but between man and woman it is that secret affinity which draws one to the other, enchains them by the sweet sympathies of the soul and the irresistible attraction of the senses, and confounds them in a voluptuous union, indeed, for the perpetuation of the species. How potent is the instinct ! The Creator has lodged it within us in order that we may continue his work, charging us to repair the ravages of death by a continual transmission of life.

Love seems to respond to two inseparable necessities of human nature,—the desire of living in *another*, and the desire of renewed life in *another*.

Man loves because he abhors isolation, because he has need of immortality even on this earth ; has the desire of surviving himself, of prolonging his existence, in being born again in his children. Just as the sunlight, in traversing the prism, is decomposed into bundles of different colors, so love, a very complex passion, is separated by observation into many elements.

Dr. Bourgeois¹ affirms that "the union of man and woman has not alone for its end the rekindling without cessation of the flame of life. It ought still more to associate together souls, to put in common the diverse faculties of each being, to complete one by the other, and to contribute in that way to their happiness and their moral perfection. Thus it is necessary that love should partake more of the soul than of the body. Sensual love, so transitory, so monotonous, ought to be controlled and purified by the love of the heart, so durable, so varied : one should be made subordinate to the other. Then we shall have modesty and chastity there. Moral love, not dependent alone on the passionate senses of youth, but attaching itself to the soul, can alone remain, and remain faithful, because the soul alone can remain always beautiful."

¹ *The Passions in their Relation to Health and Diseases.* Translated from the French of Dr. X. Bourgeois. Boston, 1873.

It is thus that, through the long centuries, love has been understood by men of the greatest genius and of the most beautiful souls, — by Socrates, Plato, Plutarch, Dante, Petrarch, Michel Angelo, Pascal, and others. Says Plutarch, "Those who have deprived love of whatever it has too gross and too violent, in order to let its light only penetrate into the soul, its splendor and its warmth, are not slow in passing from the admiration of the corporal beauty of persons whom they love to the contemplation of the beauty of the soul." And Petrarch exclaims, "All virtue comes to me from her," — he is speaking of Laura, — "as every tree from its root. That which attaches me to her is a soul superior to all that we see in this world. Her conduct and her manners are an image of the life which is led in heaven." In one of his sonnets the great Tuscan, Michel Angelo, remarks that "sensuality is not love, but an unbridled desire which kills the soul." And in the same tone Pascal says, "It seems that we have entirely another soul when we love: we are elevated by this passion, and become all greatness."

"Love is always being born," writes Pascal again; "and it is for this reason that the poets represent it as a child." In love man is more adventurous, more audacious: he gives to it only *a part of* his heart and spirit, reserving himself for

other passions. On the other hand, more impressionable, more tender, than man, woman is more sensible to love: she is more sincere in her passion, gives herself up to it entirely, sacrifices herself without reserve.

We have already noticed some of the wonderful phenomena which manifest themselves in the organism at the epoch of puberty, the dawn of love. They concur in preparing both sexes with physical and moral attributes which render them worthy of the reproduction of the species.

The young man becomes more manly and more vigorous, his muscles acquire form and stability, his chin is covered with a downy beard, his voice becomes sonorous, a masculine expression marks the features of his countenance and announces his future greatness. The blood circulates with more activity in his veins, warms the brain and the heart, and brings to all the functions a new vigor. Sensations hitherto unknown throw this young soul into vague inquietudes, into languishing reveries, which are not without charms. A desire to see and to learn leads him to fathom the mysteries still hidden. The necessity for love manifests itself by voluptuous dreams, and by an expansive ardor which impels him towards woman. Then come the timid provocations, the passionate demonstrations. But the young man loves at first without knowing

whom he loves. He loves the *women* before loving one woman alone : he seeks them, he pursues them, envelops them with his glances, breathes in their perfumes, trembles at their least contact. All his senses, directed towards love, procure him a thousand varied enjoyments.

How is it with the young woman? Preserving her soft and delicate complexion, she becomes enriched in freshness and in beauty : her graceful proportions take on voluptuous contours. The organs of generation develop the function of menstruation. Feeling the sympathetic reaction impressed on her whole being by this brilliant change, the girl, with no reluctance, quits her childish plays, gives herself up to tender aspirations, becomes pensive, melancholy, seeks the silence of solitude, and from time to time is seized with involuntary tears, — those delicious tears which always comfort. She creates for herself, then, an ideal being that her imagination is pleased to clothe with all charms, all qualities. It is on him that she concentrates all the faculties of her soul ; it is he that she sees by day in her thoughts, by night in her dreams ; it is in him that she hopes : he will be her love, her happiness. Oh, sweet illusions, that are too often replaced by the saddest realities !

At length the young man and the young woman *have discovered* each the other. He has sought

physical beauty, she moral beauty. He exhibits a love more sensual, more jealous, more transitory ; she a love more tender, more trusting, more faithful. Who concedes the most, loves the most. Before sexual union, man loves the more earnestly, because he sacrifices more, — pains, marches, contests : he spares nothing. But, when the act is consummated, she, in turn, loves more, and for a longer time. Her love then becomes labor and suffering. She must nourish with her blood the being to which man has communicated life ; she must bring it into the world in the midst of cruel pains ; she must continue for it incessant cares.

Thus we are enabled to understand, with Madame de Staël, how that “ love, which is only an episode in the life of men, is the entire history of the life of women.” Nature, as it were, has given to woman only one desire, — love ; only one duty, — love ; only one recompense, — love. “ We can divide,” says Reveillé-Parise, “ the life of women into three periods : in the first, they dream of love ; in the second, they make it ; in the third, they regret it.”

When love is pure and true, it finds its complete satisfaction only in the indissoluble bond of marriage. Marriage is its natural consummation, because it gives to it union, peace, stability, and all the advantages which it cannot possess of itself.

Movable, it attaches it ; restless, it calms it ; egotistical, it forces it to devotion ; sensual, it makes it chaste ; oppressive, it renders it respectful.

We frequently hear it said that marriage is the tomb of love. How insane the man or woman that credits such a thought ! If love be considered only in relation to its sensual pleasures, then may marriage seem to put an end to it. But is not human love also, and above all, a sentiment coming from the soul ? and requiring, therefore, the communion of soul with soul, the spiritual possession of being by being ? Marriage, which enfranchises man from the tyranny of the senses, leaves to love all of its buoyancy : it is even its emancipation, the only true, the only real one. In marriage passion is less vivacious ; but that which it loses in freshness, it gains in maturity. The flower withers ; but the roots penetrate deeper, and the fruits are multiplied.

Marriage, then, is the only means to regulate love, and to direct it to its proper object. It equally prevents dissipation, and cold and unnatural indifference ; it prolongs life, promotes *domestic* joy, which is the purest, the most uniform, and the least wasting of all happiness. It tends to moderate over-strained hope and enthusiastic speculation as well as excessive care.

We go out of the world by the same changes

almost as those by which we enter it. We begin as children : as children we leave off. We return at last to the same weak and helpless condition as our first. We must have people to lift us, to carry us, to provide us nourishment, and even to feed us. We again have need of parents. And how wise the establishment ! We find them again in our children, who now take delight in repaying a part of that kindness which we showed to them. Children now step, as it were, into the place of parents, while our weakness transposes us into the place of children. The venerable oak, on the other hand, does not enjoy the benefit of such a wise regulation. The old decayed trunk stands alone and forgotten, and in vain endeavors to procure from foreign aid that support and assistance which can be the work only of natural affection, and the bonds of nature.

We must now speak in regard to the proper age, and the conditions most favorable to entering upon the married state. As has been already observed, it is necessary that the body shall have accomplished its growth ; that the functions shall have completed their evolution ; that the intelligence shall have acquired its power, and the heart its treasures. When the period of puberty is fully completed, then only is there maturity, — procreative maturity : it is nubility, the age of marriage.

In the temperate climates nubility is fixed by most physiologists at the twentieth year for women, and at the twenty-fifth year for men. However, it varies a little according to the constitution, the morbid predispositions, or the state of health of each individual.

In premature unions or precocious marriages very many ills are hidden. To use, before the time, the pleasures of love, is to arrest its growth, to make a delicate complexion, emaciated muscles, feeble organs, poor blood. Moreover, in proportion as there is an hereditary or acquired predisposition to any constitutional disease, a too early conjugal association tends to awaken it, — to make it break forth with violence. Imprudent are the parents who shall counsel a hasty marriage of a daughter under such circumstances ; for they will find ere long that the bridal flowers will transform themselves into the cypress of mourning.

Let no one, then, count on the salutary influence of a conjugal union to strengthen a delicate constitution, to ameliorate or cure a chronic disease. It is a hope always cruelly deceived. Certain physicians are in the habit of advising marriage as a remedy for some affections of the uterus, so often observed in young girls, and for the nervous symptoms which are consequent upon them. "Be on your guard," says M. Courty, "against hoping

that marriage may cure a uterine disease. It aggravates every real morbid condition. Pregnancy, for one uterine disease that it cures, renders worse a thousand."¹

The sad influence of precocious marriages extends itself still more to the progeny. Without entering into particulars, do we not know that the first years a tree bears fruit that these fruits are in small number, and of inferior quality?

Unhappy fares the young woman who unites herself with a man verging on years of decrepitude. Such a ridiculous and hideous amour has, we know not what, that is revolting to nature. There can result only pains, regrets, criminal temptation for the wife. The products of such a match are sickly, and destined to a premature death.

A word, too, about marriages between blood relatives: they should be avoided, because they almost always produce deterioration of the race. We do not deny that a few such alliances have been productive of beautiful and vigorous children; but this was because the parents, in their physical and moral constitutions, presented remarkable features of dissemblance, of contrast.

At the time when love first begins to be experienced by tender youth, there will be great need for care, solicitude, and gentleness on the part of

¹ Courty: *Traité des Maladies de l'Uterus*. Paris, 1868.

parents, in order to direct this undefined sentiment towards that which is beautiful and good. The virgin heart is greedy for love. Very well ! be all love for it, and surround it with the affection of your own. Seek to maintain the activity of the body and mind by varied, agreeable, continuous labors. Enlighten the developing boy and girl, little by little, concerning the true state of society, its attractions and its dangers, its passions and its quicksands. Speak with reason, seriously, without exaggeration, giving wise instruction, prudent warnings, in order to prepare them for the position they must fill. Far or near, watch over them without cessation.

It cannot too often be urged, that, at such a crisis, there should be established between mother and daughter, between father and son, the tenderest confidence ; and that it should always prevail.

We need hardly add that love should necessarily precede marriage. Before their destinies for life are united, man and woman should be bound together in spirit and in heart, that is to say, *affianced*. The old-time custom of betrothals is the safeguard for the purity of morals and the happy association of husband and wife. The Greeks, the Hebrews, the Romans, and all modern peoples recognized this almost divine institution. Chaste love, consecrated by betrothals, can be cultivated in the midst of

work. It lightens toil ; it banishes fatigue ; it illumines the horizon of life with delightful prospects. It excites in the young man the manly courage and the high intelligence to create for himself a position in the world ; in the young woman it rouses the noble ambition to perfect herself to become a worthy companion and good adviser.

Unions thus projected in advance, freely from reciprocal esteem, give time to become acquainted with each other, to appreciate and to fit themselves for each other.

Marriage is accomplished. In this new life the husband and the wife stand in the relation of preceptors to each other. The woman, more of a stranger to practical life, less serious, less strong, becomes the pupil of the husband, who, by his tender relations, initiates her, little by little, into the intellectual and moral world in which he dwells. The husband learns as much as he teaches : he discovers, in the depths of the soul of her whom he loves, treasures of affection, of goodness, of delicacy, before unknown to him.

If they are wise, the young married couple will retire from the noise and distractions of the world, living together in the greatest possible intimacy ; for it is in silence and solitude that their metamorphosis will take place, and they will form themselves most quickly for this life of two.

Finally, woman must regard marriage as a serious condition. In the most humble acts of family life it is possible to have an art for pleasing the taste, the imagination. At the domestic fireside, grace, elegance, poetry even, should reign ; for all animate, vivify, and become colored with the breath of sentiment. Let the wife still be the intellectual companion of man, raising herself to his level, sharing in the interest of his thoughts and his career, refreshing his moments of leisure by the accomplishments and charms of a cultivated mind.

O young woman ! if you accept this part, so noble and so beneficent, of tutelary angel, never should you consume your time in the frivolous futilities of vanity, in the extravagance of luxury ; never should you put your whole soul into your silks and laces, your golden trinkets and your gems ; never should you think to seek for a fanciful ideal — culpable hopes ! a troubled future ! — in romantic passions. Be assured that you will always be pleasing, and to all, by the beauties of the mind, the charms of the heart, the attraction of the virtues.

CHAPTER IV.

PREGNANCY AND THE DEVELOPMENT OF THE EMBRYO.

WE are now arrived at the bridal night, during which life is only tenderness and infatuation. This new and sudden situation, consecrated to please, to love, to confess it, and to hear it repeated, makes giddy, enchains, transports in spite of one's self. It is a delirium, it is an exaltation which holds one fast in a ravishing madness. One is no longer himself: he is identified with the being loved. He does not think, feel, breathe, live, except in her. Of two hearts, of two lives, there is no longer but one heart, but one life.

The first sexual intercourse in the female is usually more or less painful, on account of the rupture of the hymen. In the male it is preceded by a longer or shorter period of excitement, the most important manifestation of which is the erection and rigidity of the organ termed the *penis*. During this erection the penis becomes exquisitely sensitive; and the introduction of the organ into the female vagina, pressure by the contracting efforts of this channel, and friction, increase this

sensibility, until what is known as the "venereal orgasm" occurs. At this moment there is a peculiar and indefinable sensation, almost immediately followed by spasmodic contractions of other portions of the male generative system; and, at the climax of the orgasm, the semen, or fertilizing fluid, is forcibly discharged from the urethra into the vagina. The ejaculation of the semen terminates the venereal act, and is followed by a feeling of lassitude, a general sense of fatigue of the generative organs, and placidity of the penis.

The pleasurable emotion of the male is usually shared in by the female; and this may even be intensified by the undue sensitiveness of the external organs, and the pain caused by the rupture of the hymen. During the excitement in the female there is a certain amount of erection of the clitoris, — which corresponds in a measure to the male penis, — and of the glands situated at the vaginal orifice. There is also an increase in the secretions about these parts; and there may be an ejaculation from two glands opening near the *labia minora*, called the glands of Bartholine. By the friction of the male organ against the clitoris, against the vaginal walls, and probably by its contact with the neck of the uterus, the excitement of the female increases, the vaginal vessels become swollen, the *secretion of mucus* by the external organs becomes

abundant, and this finally culminates in an orgasm, or venereal crisis, similar to that experienced by the male, with a copious discharge of mucus. A slight degree of lassitude in the female follows sexual intercourse ; but this is not usually so marked or so prolonged as in the male.

It has been observed by physiologists that the excitement and congestion attendant upon sexual intercourse may hasten the rupture of a ripe Graafian vesicle in the human female, and, consequently, the discharge of the ovum.

We must now explain how it is that the ovum becomes fecundated. But, first, we must know more about the *semen*, or, as it is called also, the *spermatic fluid* ejaculated by the male.

The semen is a slightly mucilaginous, grayish or whitish fluid, of faint but peculiar odor, which is secreted chiefly in the *testicles*, organs analogous to the ovaries in the female. After ejaculation, this fluid becomes jelly-like. In the healthy male, at the climax of a normal venereal orgasm, from half a teaspoonful to a full teaspoonful of the fluid is emitted. Anatomically considered, the semen contains no important elements except the *spermatozooids*, which are invisible to the naked eye, but, under the microscope, show a slight pear-shaped and flattened *head* and a thread-like appendage, or *tail*, terminating in a fine point. These sperma-

tozoids, which are indeed the *masculine ova*, or generating principle, are never found in the semen before the age of sixteen or seventeen years; but during adult life, and even at an advanced age, they appear fully developed, and in active movement. It has been noticed, however, that, if sexual intercourse be frequently repeated at short intervals, the ejaculated fluid becomes more and more transparent, without spermatozoids, and consequently deprived of fecundating properties.

As we have said, the spermatozoids move about in the fluid with considerable rapidity and force. Under favorable conditions, particularly in the generative passages of the female, the movements continue for several days, — a fact quite important in its bearing upon the limits of the time of fecundation. Cold water, on the other hand, speedily arrests the movements, as do also all solutions of an acid character.

Now, it is not absolutely necessary that the voluptuous sensations which in man accompany the *ejaculation* of the spermatic fluid during coition should exist in woman for the induction of *fecundation*. The sole conditions fulfilled by the external organs of generation in the woman are to allow the introduction of the fluid into the vagina, and *to hold* it there. On account of the fact that the *aperture of the penis* during erection has a verti-

cal, and that of the neck of the uterus a transverse, position, it has been thought by some authorities that the fluid may be thrown directly into the uterus. Careful investigation, however, has shown that it is emitted only into the vagina. During the height of the sexual orgasm, there is an ejaculation of mucous fluid from the neck of the uterus ; and it is this fluid which is destined to provide a vehicle for the spermatozoids, and allows them to arrive with certainty into the neck of the uterus. That the semen, or rather the spermatazoids, may find entrance into the uterus without ejaculation on the part of the female, has been also established beyond doubt.

The spermatozoids, once within the neck, pass rapidly up through the uterus into the Fallopian tube, and even to the surface of the ovary. How long a time is required for this ascent, or for the descent of the ovum from the ovary into the uterus, cannot be stated. It is well known, however, that fecundation can take place only at the ovary, or in the most dilated portion of the Fallopian tubes.

The encounter of the spermatozoids with the ripe ovum constitutes what is called *conception*. We can only suppose the mechanism of this union of the male and female elements. Probably the spermatozoids move actively around the ovum, collect toward a certain point, and then penetrate

the vitelline membrane. What becomes of them then can only be surmised by considering the remarkable series of changes involved in the first

processes of development. To these changes we now direct the attention of the reader who seeks to know more of the strange mysteries of human life.

After the male and female germinative elements have come in contact, a round nucleus appears in the centre of the vitellus of the ovum. Soon afterwards this nucleus subdivides into two nuclei, and by a similar process of cleavage the vitellus itself separates into halves. In this manner the original

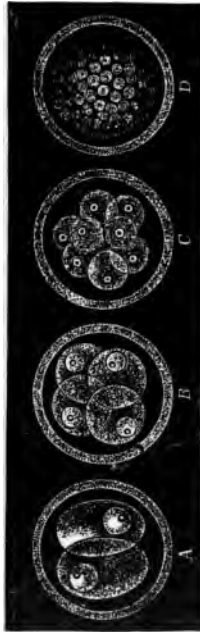


FIG. 6. SEGMENTATION OF THE OVUM.

A, The Ovum divided into two Cells; B, The two Cells divided into four; C, The four Cells divided into eight; D, The Ovum has become a round, mulberry-shaped mass.

cell is converted into two cells, each resembling the other, and both lying near together within the vitelline membrane. To this division of cells the

term *segmentation* has been applied. By a continuation of the process the two new cells are converted into four, the four into eight, and so on in succession, until finally a great multitude are generated, all closely crowded together, and giving to the ovum a mulberry appearance, as plainly shown in our illustration.

Next, a clear fluid accumulates in the centre of the ovum, and increases in amount until finally the cells are pressed to the surface. Thus the ovum is converted into a globular vesicle, whose walls are composed of a single layer of cells, which form a continuous membrane. By the absorption of fluid, in its transit through the Fallopian tube, the ovum is increased from one one-hundred and twentieth of an inch to from one-fiftieth to one-twenty-fifth of an inch in diameter.

All of the cells resulting from the segmentation of the original vitellus do not, however, take part in the formation of the continuous membrane, of which we have just written. At one point upon its surface exists a dark, round spot, caused by an accumulation of a portion of the cleavage cells upon the inner surface of the membrane. By extension this cluster gradually spreads over and lines the inner surface of the membrane. In this way the ovum becomes enveloped by two cell-membranes, termed respectively the *ectoderm*,

or outer layer, and the *entoderm*, or inner layer.¹

At the same time a stratum of fluid forms between the external layer of the continuous membrane and the *chorion*, as the *zona pellucida* is now called. Before the completion of the *entoderm*, a bright, round spot appears upon the surface of the vesicle. It is this spot which marks the point at which all the more important processes connected with the development of the embryo take place, and is termed the *germinative area*. Later on, this area assumes an oval shape (Fig. 5), with a bright centre and a dark border. Subsequently, a third intermediate layer of cells, termed the *mesoderm*, is developed between the *ectoderm* and the *entoderm*.

About the time that the *germinative area* loses its circular form, there appears in the middle of its bright centre a large, dark spot, oval, termed the *embryonic spot*, or, by some authors, the *protosoma*, because it represents the most primitive stage in the development of the embryo. Then, of a sudden, there appears in the middle of the *embryonic spot* a delicate line termed the *primitive trace*, which divides the spot into halves. This trace consists of a groove or furrow, bordered by two ridges,

¹ It is almost impossible to avoid using *technical* terms in these descriptions. The interesting nature of the subject will well repay the reader in her attempt to master them.

termed the *dorsal plates*, and formed by a thickening of the external layer.

Meanwhile the dorsal plates continue to grow, and, by curving towards one another, finally meet



Fig. 7. — HUMAN EMBRYO AT THE THIRD WEEK, SHOWING VILLI COVERING THE ENTIRE CHORION.

in the median line, so as to form a closed tube in which is developed the central nervous system. Thus it will be seen that the organ through the agency of which the individual is brought into contact with the external world is primitively derived from the external layer, the ectoderm.

From the time the ovum has passed into the uterus it derives its nourishment from the mucous supply of that organ, at first by simple absorption, and afterwards by the formation of the *placenta*, an organ through which the blood of the foetus circulates, separated from that of the mother by the thinnest partitions.

The process of development now goes on rapidly, so that, in the third and fourth months, the union of the foetal and the maternal tissues is very intimate. From this time onward growth continues, the foetus becomes a perfectly formed child, and the day for "delivery" dawns.

It is customary to reckon the duration of pregnancy at two hundred and eighty days, ten lunar months, or nine calendar months. The following particulars concerning the principal changes in each month may prove of interest:—

FIRST MONTH. — At the end of the second week the embryo is represented by the embryonic spot, and the dorsal plates are developed. The entire ovum measures one-fourth of an inch, and the embryo one-twelfth of an inch.

SECOND MONTH. — The embryo measures from two-thirds to one inch in length. The ovum is about the size of a hen's egg.

THIRD MONTH. — Towards the ninth week the *embryo is between three and three and a half inches*

long, and weighs about one ounce. The placenta is formed, though of small size. The neck now separates the head from the trunk ; the ribs are developed ; the mouth is closed by the lips ; thin, membrane-like nails appear upon the fingers and toes ; the genital organs begin to form.

FOURTH MONTH. — Towards the end of the month the length of the umbilical cord is thrice that of the foetus, which latter measures from four to six inches. The bones of the skull are hardened ; the mouth, eyes, ears, and nose assume their proper shape ; hair begins to form upon the scalp ; and the sex is distinguishable. The foetus makes slight movements with its limbs.

FIFTH MONTH. — The length of the foetus is from seven to ten inches ; weight, nearly ten ounces. The head is still over-large ; the face is wrinkled, and wears a senile aspect ; fine hair appears over the whole surface of the body. The mother now feels distinctly the foetal movements within the uterus.

SIXTH MONTH. — Near the close the foetus is about twelve inches long ; weighs twenty-three ounces. The deposition of fat begins ; the eyelids separate. If born prematurely at this time, the foetus will breathe feebly, but will die in the course of a few hours.

SEVENTH MONTH. — The foetus measures about

fifteen inches, and weighs about thirty-nine ounces. If born between the twenty-fourth and the twenty-eighth week, the child will move its limbs, and cry feebly, but will probably survive only a few hours or days.

EIGHTH MONTH. — The foetus measures seven-teen inches, and weighs about fifty-two ounces. The hair of the head increases in thickness, and begins to disappear from the face. With care the life of a child born within this period may be preserved.

NINTH MONTH. — The length is between sixteen and seventeen and a half inches; the weight is about sixty-four ounces. The body has become rounded, and the face more comely. If born at this period, the child will be less energetic than at full term, will sleep a great part of the time, and is prone to die with lack of careful attention.

TENTH MONTH. — In the first two weeks the measurement is about nineteen inches, and the weight about seventy-seven ounces. At birth the body is well rounded, and the skin is fair, with little or no down. The nails project beyond the finger-tips; the genital organs are perfectly well formed. On making its *début* the child cries lustily, moves its limbs freely, and nurses when put to the breast. After a few hours, it passes urine, also the so-called *meconium* from the bowels. The average length at

birth is from twenty to twenty-one inches ; while the average weight is about seven pounds.

The details just given relative to the development of the foetus after the first month must not be accepted as absolutely accurate in every instance. While growth is steadily progressive, and follows the same order always, still it is liable to be retarded at intervals, according to the circumstances of health or disease which surround the mother.

CHAPTER V.

SIGNS AND SYMPTOMS OF PREGNANCY.

THERE is an idea, based upon rather general and indefinite observations, that conception is most liable to follow an intercourse which occurs soon after a monthly period. It is certain, however, that it may occur at any time. It is extremely probable, that, during the unusual sexual excitement which a woman almost always experiences after a period, the action of the internal organs attending and following intercourse presents the most favorable conditions for the penetration of the fecundating elements ; and this may explain the more frequent occurrence of conception as a consequence of intercourse at this time.

It is not rare to see young married people abandon themselves with too much ardor to sensual enjoyments. With abuse comes disorder in the health. Love does not transmit vitality except at the expense of him who gives it. In procreation man in some sort snatches away from himself with violence a part of his being. It is the flesh of his *flesh*, it is the blood of his blood, which he gives ;

for the seed is the quintessence of life. It is an established fact that in woman we have grave disorders in menstruation, frequent miscarriages, acute or chronic inflammation or irritation of the uterus, leucorrhœa, and, above all, sterility. These conditions may exist before marriage : more frequently they follow the nuptial union, and may be the direct result of venereal excesses. In man, we have gonorrhœa, seminal losses, and impotence. These different affections are, we say, very frequent in the early days of marriage : in one or the other of the new couple the health is visibly altered. There is usually complete ignorance on their part as to what cause to attribute this change ; and, if wisdom prevails, medical advice will be sought.

Very often, too, are young people astonished, and despair at not seeing their most cherished hopes realized. Either conception does not take place, or, occurring, pregnancy does not arrive at its full term. The menstrual epochs are replaced by uterine hemorrhages, or flooding. Too much thought and attention and care cannot be bestowed upon these matters. Most often sensual excesses are the cause : the fecundated ovum cannot be developed, and is sooner or later expelled in consequence of the excitations frequently provoked by too oft-repeated coition.

But we will now suppose that pregnancy has oc-

curred. By what signs, symptoms, or changes in the physical condition of the wife may it be recognized?

First, The suppression of the menses is, to most women who have been exposed to impregnation, the first warning of the occurrence of conception. Still, it is by no means reliable; since in married women a retardation of the menses for a few days, or even two or three weeks, is not an uncommon occurrence. This is especially true of newly married women, in whom the disturbance appears to follow the novelty of the matrimonial relation. A sudden cold, fatigue, grief, and, in the unmarried, apprehension, will cause a partial or complete suppression. Of course, all these conditions must be eliminated, in order to determine whether the cessation is induced by pregnancy. On the other hand, conception has actually taken place without suspending menstruation until a few months after the normal time.

Second, Certain disturbances of the stomach are symptomatic of the pregnant state. Nausea and vomiting, occurring in the morning and following suppression of the menses, are signs of considerable importance. This "morning sickness," as it is called, may also occur at any time of the day, and seems especially induced by the sight of food. *In character* it is a peculiar, deadened, sinking

feeling at the pit of the stomach, not unlike that caused by the motion of a vessel at sea. It may occur within a few hours of conception, and may last only a few weeks, or, rarely, throughout the whole of pregnancy. Its duration and intensity vary in different individuals.

Third, Another symptom, often extremely troublesome and distressing, is profuse salivation. There have been cases reported where the quantity of fluid which poured from the mouth might be measured almost by pints in the twenty-four hours.

Fourth, Tingling sensations and swelling of the breasts, the appearance of little follicles around the nipple, and secretion of milk are valuable, though not infallible, signs. To be of importance, they should be persistent and progressive.

Fifth, Increase in the size of the abdomen always suggests pregnancy. But this enlargement *may*, it must be remembered, result from dropsy, from an excessive deposit of fat in the abdominal walls, from flatulent distension, and from various tumors, having no connection with the uterus. Generally speaking, the abdomen does not begin to enlarge, in pregnancy, before the end of the third month : but usually the hips seem to enlarge and broaden prior to this time ; and the reason of this is, not so much from the pressure of

the uterus, but from the intestines being displaced.

Sixth, During the third month the neck of the uterus softens and swells, and the membrane to the touch of the finger yields a velvety character, not unlike that of the moist lips. In a woman who has *never* borne children, the mouth of the uterus, instead of offering the sensation of a transverse slit, feels circular. On the contrary, in women who have borne children, the tip of the finger penetrates to a greater depth than in its former state.

Seventh, About the sixteenth or eighteenth week the movements of the foetus, not unlike the tremulous motion of a little bird held in the hand, excite the attention of the mother. Intelligent women claim to notice these movements as early as the twelfth week. They are rendered more active by a long fast, and by certain positions in bed. These movements are termed *quickenings*, and are proof positive of pregnancy.

There are other signs which a skilful physician is able to detect, but which possess no special value to the mother. Hence all allusion to them here is omitted.

Inasmuch as it has proved impossible to ascertain the precise moment in which conception takes place, it has been customary to assume, as the *starting-point* for the reckoning of gestation, either

the date of the last menstruation or that of a single fruitful coition. But it is not often, however, that the particular coition which has resulted in pregnancy can be definitely remembered.

For good reasons, therefore, it is well, in all calculations of the duration of pregnancy, to select the last menstrual period as the starting-point, and to reckon from the *first*, rather than from the last, day of the flow. Inasmuch as it has been customary to regard pregnancy as extending over ten lunar months, or ten menstrual periods of twenty-eight days each, it is necessary only to add two hundred and eighty days to the selected date, in order to compute the probable date for confinement. A more ready method, however, is the following: Count forward nine months, or, what amounts to the same thing, count backward three months, and then add seven days (in leap years, after February, six) to the date chosen as the starting-point of the calculation. The annexed table, often employed by physicians, enables one to determine the prospective date at a glance: —

OBSTETRIC CALENDAR.

NINE CALENDAR MONTHS.			TEN LUNAR MONTHS.	
FROM	TO	DAYS.	TO	DAYS.
January 1	September 30	273	October 7	280
February 1	October 31	273	November 7	280
March 1	November 30	275	December 5	280
April 1	December 31	275	January 5	280
May 1	January 31	276	February 4	280
June 1	February 28	273	March 7	280
July 1	March 31	274	April 6	280
August 1	April 30	273	May 7	280
September 1	May 31	273	June 7	280
October 1	June 30	273	July 7	280
November 1	July 31	273	August 7	280
December 1	August 31	274	September 6	280

The above calendar may be read as follows :
 A woman has ceased to menstruate on the 1st of July ; her confinement may be expected at soonest about the 31st of March (the end of nine calendar months), or, at latest, on the 6th of April (the end of ten lunar months). Another has ceased to menstruate on the 20th of January ; her confinement may be expected on the 30th of September, plus twenty days (the end of nine calendar months), at soonest, or on the 7th of October, plus 20 days (the end of ten lunar months) at *latest*.

It rarely happens, unfortunately for even the shrewdest calculation, that labor comes on exactly as predicted. In few cases, however, does the error exceed five days,—a degree of exactness, therefore, sufficient for all practical purposes.

CHAPTER VI.

THE PREPARATION FOR CHILDBIRTH.

DURING the pregnant state the physiological condition of the woman approximates so closely to what would be regarded as disease at other times that the necessity arises for a careful observance of hygienic laws, in order to restrain within limits consistent with the healthy progress of gestation whatever distressing symptoms may arise.

Above all else an abundance of pure air is a matter of prime importance ; because, during pregnancy, the lungs give off an increased quantity of carbonic acid, and hence demand an increased supply of oxygen. The air must be *fresh* as well as pure : hence small, close, overheated rooms must be avoided.

The proper diet includes every thing nutritious and easily digestible. Too much pastry and cake and confectionery do injury. Healthful food — that which makes bone and blood and muscle — is what is wanted. As a rule, the better the appetite, the less will be the discomforts of gestation.

The dress, however nice and neat it may be,

should be loose-fitting and easy. Tight corsets and garters confine the circulation, and therefore serve no useful purpose. Of course, the lower abdomen and limbs should be well protected in inclement seasons by flannel drawers.

From first to last, gentle exercise for the body, even to the verge of fatigue, should be encouraged. A long walk before breakfast helps to maintain the appetite, and to ward off disagreeable sensations. A carriage-drive to pleasant scenes and localities predisposes to refreshing sleep, and serves to enliven the spirits. Of course, violent exercise should be scrupulously avoided ; as this is liable to bring on a miscarriage, especially during the third and seventh month. At the epochs when the menstrual period might be expected to recur, if no pregnancy existed, special care should be taken to avoid long railway-journeys, long drives, or even very long walks. It is still a question among medical men as to whether sexual intercourse should be indulged in during the pregnant state. If not absolutely to be prohibited, it at least should be of infrequent occurrence. We have already stated that excesses in the newly married are a common source of miscarriage.

While too frequent bathing in a bath-tub is injurious, the skin should be kept in good condition by daily sponging. The vaginal douche is a source of comfort to many women, whose external genitals

are liable to be subjected to an increased vaginal secretion. In no case, however, should the quantity injected exceed a pint of tepid water.

The pregnant woman is liable to spells of fretfulness, even of irritability. Those who are associated with her should bear this in mind, and exercise towards her the utmost gentleness and forbearance. Stern treatment will not answer ; for such demeanor is the product of nervous derangement, and is due rather to physical than to moral fault.

It is often remarked by intelligent observers that the hardest worked women, and those whose cares of life are manifold, and whose hardships, we may add, are severe, pass through the term of pregnancy with the least discomfort ; while, on the other hand, women reared amid luxurious ease and refinement suffer all the disorders imaginable. In one sense this is partially true ; and the reason is found in the fact, that, the finer the breeding, the less hardy is the plant, the animal, or the individual. The best medicine in such cases is any thing that will produce a forgetfulness of self ; that is, innocent amusement and occupation for the mind. When, however, these disorders advance beyond the stage of discomfort to that of actual danger or suffering, every effort is needed for their relief.

One of the most noticeable disorders of pregnancy is due to the changes which this state pro-

duces in the blood, and is termed *anæmia*. The patient is sensible of a loss of weight, muscular weakness, increased nervousness, and irritability. As a consequence, the appetite fails, digestion is deranged, neuralgic pains develop, palpitation and oppression in the heart are frequent, and hysteria and even insanity may result. If undertaken early, the treatment will be simple, and should comprise light, air, moderate exercise, good food, regulation of the bowels, cheerful society, and a respite from household duties, together with iron, in some form, as medicine.¹

The condition thus described not unfrequently gives rise to a swelling of the lower extremities, beginning at the ankles, and extending upwards, and invading often the labia, the vagina, and even a portion of the uterus. When unassociated with kidney difficulties, this condition is not dangerous, though it often causes much discomfort. The swelling usually continues until confinement. No medication should be resorted to, unless ordered by the family physician.

Varicose veins are not an uncommon occurrence during pregnancy. So long as the large veins are not involved, they possess slight significance. Should the trouble threaten to increase or become serious, it will be necessary for the patient to wear

¹ Vide Prescription No. 1, Appendix.

an elastic stocking, and to keep the bowels well but gently relaxed.

For the *nausea* and *vomiting* which are so troublesome, countless remedies have been recommended, and have, nearly all of them, proven uncertain. If the matter becomes very distressing, and a change of scene is impracticable, something must be done in the way of medication. In many cases the application of an electric (faradic) current to the pit of the stomach gives relief; in others, the ice-bag applied to the nape of the neck. To all, effervescing beverages — carbonic-acid water containing a drachm of bromide of potassium to the siphon, or even plain soda-water, ice-cold — are very grateful. If these efforts fail, stronger medicinal agents will be required.¹ When the vomiting is literally uncontrollable, — a very rare event, — and death from starvation threatens, there remains but one resource; namely, the artificial induction of abortion *by the physician*.

During the later months of pregnancy a large number of women suffer considerably from *heart-burn*. It can rarely be cured, but may sometimes be relieved by half-teaspoonful doses of the aromatic spirits of ammonia, or by small doses of carbonate of magnesia.

A *pruritus*, or itching of the external genitals,

¹ *Vide* Prescription 5 and *seq.*, Appendix.

without any visible affection of the skin, sometimes afflicts pregnant women. The application of vaseline, or bathing the parts with weak soda-solution, usually affords relief. Sometimes the itching is confined to the distended abdominal walls. In such cases cloths wet with camphor liniment, with the addition of chloroform, prove efficacious. Vaginal injections of borax or carbolic-acid solutions, a half-pint twice daily, have been found valuable in pruritus of the vulva.

For the *face-ache*, or *neuralgia*, which is so common, the external application of camphor liniment will answer in mild cases.

Finally, a word or two about the *sleeplessness*, which, towards the end of pregnancy, renders so many women unfit for encountering the perils of childbirth. Under no circumstances should opium in any of its forms be employed; but the main reliance should be moderate exercise, and the bromide of potassium in fifteen or thirty grain doses, as circumstances may dictate.

CHAPTER VII.

LABOR : ITS STAGES AND MANAGEMENT.

ABOUT the thirty-ninth week of pregnancy the uterus begins to sink downward into the pelvis. This change of position is most gratifying to the woman ; for it enables her to breathe freer, and puts an end to all gastric disturbances. At the same time she walks about with less ease, the swelling of the limbs increases, and there is an almost constant desire to pass water. Later on, a glairy mucous secretion is poured out from the neck of the uterus, the vagina loses its rigidity, and the vulva gapes open.

Some time in the night or towards morning, as it proverbially happens, the husband or nurse is made acquainted of the approaching labor by the painful contractions of the uterus, which render the woman restless, and dispose her either to bend forward with clinched hands, or to seek some firm support to ease her sufferings. If not already at hand, the physician or midwife should be summoned at this stage.

The pain of labor begins with the dilatation



Fig. 8. — ILLUSTRATING THE MECHANISM OF LABOR IN ONE OF THE MOST COMMON DELIVERIES.

of the internal mouth of the uterus ; and, as this opens, the foetus descends, and presses upon the canal of the neck. Gradually the pains increase in intensity and frequency. When the dilatation has reached a certain limit, and the external mouth has a diameter of from three to three and a half inches, the protruding membranes surrounding the foetus remain tense in the intervals between the pains, and are then ready for rupture.

After rupture, which usually occurs spontaneously, the water in front of the child's head escapes. There is a brief pause, followed by the descent of the head into the canal, which finally becomes so dilated that the cervix and the vagina are as one and continuous. With this ends the *first* stage of labor.

Another short pause, and the pains become stronger and more frequent. With each pain the head pushes its way farther downward, but retreats a little as the pain subsides. Presently it has reached the vulva opening ; the perinæum is put upon the stretch ; the anus assumes an oval shape, until finally the head emerges fully, and is speedily, or simultaneously perhaps, followed by the expulsion of the body. With this there is an outpouring of fluid, occasionally tinged with blood, — and the child is born.

After the birth the woman usually suffers from

faintness, or even temporary syncope. At the same time there is a restful feeling of comfort and repose. But it endures only for a few minutes, perhaps a quarter of an hour, when the contractions return, which detach the placenta, or "after birth" so called, and force it into the vagina. Some hemorrhage follows the detachment, which, however, is usually quickly checked by the contractions of the uterus. When once in the vagina, the expulsion of the placenta is rapidly completed.

The average duration of a natural, uncomplicated labor is about fifteen hours, of the second stage alone about two hours.

The physiology of labor, as we have now sketched it, applies to the majority of all cases. Not all the details have been given, nor is it necessary to allude to any exceptional occurrences which are possible. So much concerns the wife and mother; the rest lies within the province of the attending physician.

For obvious reasons, too, we shall say but little in regard to the conduct of labor; but a few words relative to the necessary "appointments" of the lying-in chamber may prove of service.

First, the bedstead should not be too low, and must be moved out from against the wall. The bedding may be a hair-mattress or a straw-pal-lasse. A feather-bed is worse than nothing. Over

the mattress should be placed a rubber cloth, and over this a folded woollen comforter or blanket, to absorb the fluid discharges. Over all should then be laid a smooth sheet, while a second sheet, folded in several thicknesses, is placed beneath the hips of the patient.

Cases frequently happen of a labor coming on, and of the child being born, before the arrival of the physician. Such births are of course natural ones, and depend largely on a habit of quick delivery common to many women. Some ludicrous incidents might be cited—and probably the reader already knows of one or more—illustrating this rapidity. It may happen, therefore, that in such cases a little knowledge of “what to do next” may save further annoyance and danger.

As soon, then, as the child is born, and it is found to be breathing vigorously, and in every other respect doing well, the next step is to tie the cord. For the ligature any stout material will answer,—such as a piece of bobbin, or fine kind of tape, a shoestring, or even several thicknesses of spool-cotton. Apply this ligature at a little distance from the child,—say, the width of three fingers,—and carefully, slowly knot it tight. The ligature thus firmly applied, the cord may then be severed with a sharp pair of shears about one finger's breadth from the ligature. It is hardly

necessary to state that the purpose of the ligature is to prevent hemorrhage from the child.

The labor being over, the patient is now in the hands of the nurse, who removes all the soiled clothing, and washes the genital organs gently but thoroughly. At such a time perfect cleanliness is appreciated by the mother as never before. If there is but little or no hemorrhage, a vaginal douche of weak carbolic-acid water, quite warm, will do good.

At this stage the "binder" is adjusted. While many women do just as well without it, — and indeed we might say all when we consider the usual condition in which it is found within a very short time after its application, like a rope, high up, just beneath the ribs, acting not only as a source of great discomfort, but also as a means of injury to the patient, — still, in most cases it proves, when properly applied, a valuable support to the relaxed abdominal walls. The toilet of the woman is finally completed by laying a warm folded napkin at the vulva to receive the discharge.

An able teacher has said that the puerperal state occupies the border-land between health and disease. Still, if every thing goes on well, the condition is more like a convalescence. A slight chill, a slight rise in temperature, a slower pulse, — such *are the principal* phenomena immediately following

labor. During the first week the skin is moist and active, the appetite is lessened, the thirst is increased, the bowels are sluggish, and the urine is copious. The loss of body-weight in the first week amounts to from nine to ten pounds, or to about one-twelfth that of the whole body. For a few days some pain is experienced at intervals, due to the contraction of the uterus to its original state and size. They are known as "after pains," and are considerably intensified by suckling the infant. The "lochia" discharges from the genital passage gradually lose their deep-red color, and towards the end of the week are quite pale and thin. During the second week they become of a grayish-white color, and creamy, slowly changing to transparency, and finally ceasing altogether.

On the third day — sometimes the fourth — after labor, the breasts enlarge, and become full, tense, and sensitive to the touch. At the same time there is a little fever, and the mother complains of headache, and perhaps of feeling "chilly." This condition lasts about twenty-four hours, and disappears, followed by profuse perspiration, and usually by an abundant secretion of milk.

The normal appetite now returns. The mother, who up to this time has been half-sleeping, half-dreaming, and been quite indifferent to solid food, and perhaps taken her milk, gruel, tea, and toast

with but ill grace, now begins to be wide awake, and to crave such articles of food as soft-boiled eggs, broths, small birds, steak, chops, and the like. She should be allowed to have them, also cooked fruits of some sort. Before this change of diet takes place, the bowels should have moved freely, and thereafter constipation be overcome by some mild laxative, or, if preferred, by an injection of soap and olive-oil in warm water.

Every healthy woman, if she be also sensible, will suckle her child at least through the puerperal period. The question as to whether it is advisable to continue lactation subsequent to the resumption of household duties depends for its answer on whether the mother can make the necessary sacrifices to the interest of the child. Humanity requires that the child be subjected to no half-way procedure. If the mother have plenty of milk, and is in a position to take proper care of herself, in order that it may not become deficient in quantity or deteriorated in quality, then, by all odds, ought she to suckle her offspring, at least through the first year, as much for its future good as for her own. On the other hand, if she be naturally of a sickly or delicate constitution, or if the nipples be misshapen or flattened, or there is a lack of milk, nursing is rendered impossible.

The child, in all cases, should be put to the

breast within twelve hours following the close of labor. This first milk, scanty though it be in nourishment, is infinitely superior to all the "catnip-teas" and "sweet oil" so commonly used by the nurses. This early application benefits the mother also, — hastens the uterine contractions, diminishes the painful distension of the breasts incident to the secretion of milk, and, as most authorities believe, prevents some of the terrible diseases which may set in during the puerperal state. The breasts should be suckled in alternation; and, both before and after nursing, the nipples should be carefully washed with warm water, to which a little boracic acid has been added. Should the nipples become sore or cracked, recourse should be had to some mild astringent, such as a strong infusion of tea-leaves, lotions of borax, tannin, alum, etc. In very severe cases a "nipple-shield" must be worn, and a more powerful remedy be employed.¹ Whenever any preparation has been used, care must always be taken to sponge off with warm water prior to permitting the child to nurse.

The duration of the lying-in period varies. For the mother to remain in bed ten days is a safe rule. No attempt to get up should be made until the lochial discharge has lost its red color, and become pale: even then the effort should be tentative.

¹ *Vide* Prescription 8, Appendix.

When the abdominal walls are greatly relaxed, a well-fitted bandage should be worn for weeks subsequent to delivery, and household duties should not be resumed until the mother can walk about without fatigue or backache.

A few words now relative to the new-born infant. During the first few days of its existence the child sleeps, waking only to receive its nourishment, which it may have every two hours; and, after six months, not oftener than five or six times in the day and night. After its first bath the babe should be gently dried in soft, warm clothes; the cord should be wrapped in an oiled rag, and held in place upon the left side by a flannel bandage. After the cord has separated — on the fourth or fifth day — the wounded surface should be dressed with a carbolic-acid salve until the discharge ceases. Of course, cleanliness and fresh air are essential at all times.

In case the mother is unable to suckle her offspring, either a wet nurse must be obtained, or artificial feeding be tried. It is best to leave the selection of the nurse to the family physician, who, if he be honorable and conscientious, is the better judge of her fitness or unfitness. If the child is to be “brought up by hand,” nothing is better than pure, fresh cow’s milk, — and always from *one* cow *if possible*, — beginning with eight tablespoonfuls

of milk to eight of water, and increasing the one and diminishing the other a tablespoonful at a time as rapidly as the condition of the digestive organs will permit. The mixture should always be warmed, and a small quantity of salt; and a grain or two of bicarbonate of soda or a teaspoonful of lime-water, should be added before it is given to the child. After the third or fourth month the addition of a tablespoonful of Liebig's food for infants to each nursing-bottle will be found to yield benefit. It need scarcely be said that each time, after the child has been fed, the bottle should be scalded, and then filled with cold water. Unless such a precaution is taken, a bottle-fed infant will never prosper, and may die before reaching its twelfth month.

With the birth of a child is initiated a new *rôle* for woman. In it we recognize the accomplishment of the chief object of marriage. We have beheld the young girl in all the beauty, innocence, and excellence of girlhood; we have noted and considered in her the most wonderful mechanism which only an all-wise and divine Creator could invent; we have seen it in its proper season gaining strength, growth, and manifesting still more wonderful phenomena, and the transformation of the girl into the early bloom of womanhood. We have witnessed the dawning of love in the happy time of maidenhood, and how the soul fluttered

with its thrills, the heart burned with its flame, and thought and desire changed under its influence ; and this love was reciprocated. The ravishing adored found her true adorer ; the one, if not the counterpart of the other, was the affinity, the ideal of the other. The halcyon days dawned ; and soon came the happy union, the nuptial bliss, the perfect heaven on earth. It brought to the young couple a new revelation of life ; it opened gates before unbarred ; it revealed joys and pains hitherto unexperienced ; it made of the man a husband, and of the woman a wife.

But this was not all : there was yet a lesson to learn, a duty to perform, — the duty first, the lesson afterwards. Out of the depths of the marital affection from the two lives blended into one came a mere speck, so small that the keenest sight could not discover it, so weak that the faintest zephyr might waft it away. Yet it had a right to be, and a will to assert its right. Day by day it grew, changed form, sought nourishment, and found it ; continued to grow and to increase and to gain strength ; fluttered, moved, assumed comeliness and grace, and became human. In its chamber of darkness it slumbered long, and perhaps dreamed and forecast its future. In the great world unknown to it anxious hearts were awaiting its coming. It was known *to exist, and where* ; but there were other countless

mysteries which remained unsolved. How would it come? What would be its form and appearance, and size and weight? Would it have blue eyes, or black; a light countenance, or dark? Would it be graceful and beautiful and heroic, or otherwise?

But the spell was soon broken. The angel with the olive-branch and the silver key unlocked the door. The cloud was lifted, and it had a silver lining, which illumined the child, born in the image of his parents and of his Maker. And the angel said, "Peace! peace to the father, the mother, and the son!"

Thrice happy are they whose offspring is born and nurtured in love! for thus is love renewed, and made more sympathetic, more harmonious, and more complete.

CHAPTER VIII.

THE HYGIENE OF THE MARRIAGE-BED.

DR. GOODELL says, in speaking of the sexual relations, that "the excesses of the honeymoon journey, conjoined with its fatigues and its discomforts, are often the starting-point of uterine disease."¹ Dr. Gardner, writing on the same subject, says, "The same laws hold good here that are recognized in every other action of life. The pedestrian undertaking a journey is moderate in the walk of the first days. The wood-chopper in the forest, as well as the girl who sweeps the parlor, finds the instrument blistering the unaccustomed hand, and works gently till time has gradually hardened the palm for the occupation."²

M. Lallemand, a distinguished French surgeon, writes, "Vanity is perhaps the most common cause of venereal excesses. Man covets the esteem of his race, and especially that of women, of whom he is the natural protector. It is when in the presence

¹ Lessons, in Gynecology. By W. Goodell, M.D. Philadelphia, 1879.

² *Conjugal Sins*. By A. K. Gardner, M.D. New York, 1874.

of woman that he is proud of his intellectual and physical superiority, and of his social position ; but it is of his virile power of which he is especially proud, and which he endeavors to prove : those who are least strong in this respect most fear to allow their weakness to appear. Hence excesses arise which are not caused by real necessities, and which do not spring from a violent passion. Young men, who, soon after their marriage, had given themselves up to the ardor of their passion, endeavor to sustain the excesses with which they commenced. They dread causing a suspicion of coolness or of infidelity, though they very soon repent their first imprudence, their irritated organs being no longer in the physiological condition which at first permitted them to support such excesses. . . . To the man there is the limitation of a physical capability which no stimulants from within or without can goad to further excess. The erethism of the woman has no boundary. The unnatural irritation sometimes cannot be appeased ; and these manifestations of disease may proceed from the complicity of simple nervous local irritation with some general sympathies, until it reaches the grand ganglion, and the throne of reason itself trembles, and is shattered.”¹

As a result of this overstrain of physical power,

¹ Lallemand: *Des Pertes Seminales Involontaires*. Paris, 1869.

we have, in man, discharges and strictures of the urethra, priapism, impotence, and involuntary seminal losses; in women, leucorrhœa, hemorrhages, ulceration of the neck of the uterus, polypi, or uterine cancer, nymphomania, frequent miscarriages, and barrenness. Too often, also, we find hysteria in its most unmanageable form, and not unfrequently mania.

Indeed, when we consider the physiological effects of the venereal act, we see that they present a striking analogy with epilepsy, to such a degree that the ancients seem almost justified in calling coitus *epilepsia brevis*. Many a woman has been seized for the first time with convulsive attacks during the first night of her nuptials; and even epilepsy has come on immediately after the excesses which cause it. Most frequently, however, the abuse of the sexual privilege acts more slowly.

But it may be said that the demands of nature are, in the married state, not only legal, but should be physically right. So they are when the physical life is right, which is not always the case. Very many persons live in a hot-house, as it were, where the nervous energies are developed at the expense of the physique. Much of city life is not nature, nor are the mad feelings which grow out of it and possess its denizens nature either. The records of *the insane hospitals* disclose more terrible secrets

than most men or women have ever even dreamed of, and show plainly that the profanation of sexual passion, whether within or without the pale of marriage, is followed by the same penalties. Such statistics affirm, that, of one hundred insane men, ten have been led to the loss of reason by excessive venery, and that at least the twentieth part of all the inmates is composed of women afflicted for the same cause.

Eloquent and thrilling are the words of a distinguished French writer, Dr. Bourgeois, on this subject. "How many times," he exclaims, "in visiting the asylums of the insane, — Charenton, Bicêtre, La Salpêtrière, Saint-Lazare, — how many times have I meditated upon the deplorable consequences of debauchery, upon the terrible but just chastisements inflicted in consequences of outraged hygiene and morality! 'O golden youth!' said I to myself, 'at this hour so brilliant of youth, so thoughtless, — you who are intoxicated with pleasures, who taste one by one the thousand enjoyments of the senses, who lavish your gold and the luxuriant forces of your life, — may you never, like me, be present at these touching spectacles of intellectual decay and of moral degradation! Oh that you may not hear the lamentable histories of these brutish beings, these blasted heroines, who erewhile, like you, hastened from festival to fes-

tival, — like you, sacrificing themselves to idols of flesh and bones ! Now behold them, these sad victims, such as debauchery has made them ! Behold them, with wasted body, stupid countenance, an eye without fire, a face without thought ! They are there, filthy, ragged, infected, their hair disordered, with drivelling mouth, flabby arms, and trembling limbs. This woman bound by a strait-jacket, with red face, haggard eye, who vociferates injury, is tormented by *furor uterinus*. By means of automatic movements of the body, renewed without cessation, she excites unceasingly her sensations, always greedy for gross, sensual pleasures.' ”

If we did not see these hideous spectacles, we could never believe that human nature could ever descend to such a degradation of body and soul.

But we have said enough of the consequences of abuse. As opportunity is often the origin of sin, to such persons as have not the will to control or the intelligence to foresee the danger, the European custom of sleeping in single beds is to be recommended.

The question may be asked, What is excess ? And some readers may maintain that what might prove too much for one may not be enough for another. The far-famed and very far-hated Sylvester Graham used to teach that a frequency of

sexual indulgence greater than that of the weeks of the year was absolutely inadmissible, and that it would be better, both for the sexes and for their posterity, to restrict it to the number of lunar months. When this doctrine was first promulgated, the multitude almost cried, "Crucify him!" But after its author was dead, but not yet entombed, the view began to find favor, both in this country and in Europe.

One thing is certain: if the opinion and doctrine of Mr. Graham on this subject are unsound, no one versed in physiological science can set up any tangible argument against them. Some philosophers have gone even farther by assuming that the sole object of sexual intercourse is the reproduction of the species, and that to this end it should always be directed; and, as illustrating such a belief, the story is told of Zenobia, the renowned Queen of Palmyra, that she never submitted to her husband's desires except for the sake of offspring.

This last notion, we think, is not only absurd in itself, but was not the whole of the Divine intention. If so, why should the power of procreation continue in man, when not abused, as long, or nearly as long, as life? And why should the susceptibility to pleasure in women continue beyond the age to which child-bearing is limited? It must be true that coition has not alone for its

end the generation of beings ; and that it tends also to bring about unification in the nature of the couple, to facilitate the assimilation of the physical and moral qualities of both. The best authorities are united in the opinion that the semen in fact has a fecundating action which exercises itself over the entire organism of the woman. Says Frédault, "The semen does not only fecundate the ovum of the woman, it fecundates the woman herself, and exercises its action over the entire formative disposition. It is thus that the wife derives many of the qualities of character that she did not possess before her marriage, that her temperament changes, and that new habits of nutrition show themselves."¹

If, then, man neglects this general fecundation of woman, he will fail of a powerful means furnished by nature to produce the most intimate unification of man and wife, to give birth to physical and moral sympathies, that indissoluble alliance by reciprocal attachment, those concordances so happy and so desirable in the tastes and aspirations, in the habits and morals. In place of the antique virtues of the family, we see too often only coolness, indifference, disunion. But our remarks are bordering upon another feature of the subject, of which we intend to speak later on.

¹ Frédault: *Traité d'Anthropologie, Physiologique, et Philosophique. Paris, 1863.*

In order to form a just estimate of what is, and of what is not, moderation, it is better to look at facts in their real light. Man, as we know, is by nature sensual and coarse : he needs to be purified and polished. Woman by nature is impressionable and self-sacrificing : she requires to be restrained and well guarded. Marriage, rightly understood and properly directed, never fails to accomplish all of these ends. It does not advise man to become a celibate, and to woman prescribe a nunnery ; nor, on the other hand, does it permit the degradation of indulgence into prostitution. All that it teaches is self-restraint and self-denial, and the necessity to continue rational men and women instead of brutes. May we not also say of it, that it seeks to re-instamp on us that Divine image which by disobedience we have lost, or, in other words, to *purify* us gradually and wholly from sensuality by bringing our bodies under that law of which the apostle Paul makes so much in his writings ? Any man or woman, who, with the Bible in their hands and the teachings of correct science in their minds, should hold forth the doctrine that humanity, in the gratification of its various appetites, is a creature of mere instinct, on a level with the brutes, ought to be accounted as far from accordance with reason, revelation, or sound sense as it is possible to be.

So far we have been dealing with the subject in its general sense. There are special features or qualifications about which something must be said.

We have already explained the phenomena of menstruation, and need not go over the subject again. The question to be answered here is, Should sexual intercourse be prohibited during the continuance of the menstrual flow? The earliest authority, Moses the lawgiver, said yes ; but doubtless his opinion would be ridiculed nowadays by most readers, especially those not in unison with the Jewish ideas and customs. But the Talmud preaches the same injunction, and all good Mus-sulmans accept it willingly. Leaving both authorities aside, we have reason and experience showing us that sexual relations at the menstrual period are very dangerous to both man and woman. In woman there is the danger of suppression of the menses caused by undue excitement and overwrought emotion ; there is danger, also, of inducing excessive hemorrhage, or flooding. On hygienic grounds, if on no other, there should be a discontinuance of sexual intercourse ; but there is even a stronger reason, — a moral one.

Every woman, young or old, "when she has her periods, takes the greatest care to conceal it *from all eyes*. She is affected instinctively — we

will not say willingly—in her dignity. She considers her condition as a blot or an infirmity; and although her modesty—the most incendiary of the female virtues—has been spared by the omnipotence of her husband, she blushes to herself at the tribute which she is compelled to pay to nature. To constrain her in this condition to submit to conjugal caresses is evidently to do violence to what is most respectable in her nature: it is to cast her down from her pedestal; it is to rob her of the prestige which the graces of her sex assure to her. Love has need of poetry, and accommodates itself illy to the gross realities of the animal life.

“But it is not only at the menstrual epoch that the wife should conceal from the husband the details of the lower necessities to which she, as well as he, is subject. We would desire that she should endeavor never entirely to lay aside her natural charms of modesty and delicacy, even in the intimacy of the bedchamber. She will gain more than she can think in constancy and love, the most cruel enemies of which come from the destruction of the illusions and from satiety. More than one married woman will find in these lines, if she discovers all their meaning, an explanation of the inexplicable weariness of her husband, and the solution of an unsolvable enigma to her *amour propre*; that is to say, the reason of the triumph

of some rival (perhaps less endowed in both body and mind) in the affections of her husband."¹

Popilia, when reminded that pregnant animals did not permit the approaches of the male, frankly replied, "It is because they are brutes." This fact would seem to point to the conclusion that abstinence from coition during pregnancy is the law of nature.

Hippocrates, sometimes called the Father of Medicine, used to maintain that abstinence at such a time favored easier labors; and so much did Galen inveigh against intercourse during the pregnant state as being a fruitful cause of abortion, that the early Christian Fathers were led to publicly enjoin continence in the early part and towards the end of pregnancy. Dionis, a physician who flourished later, condemned such a notion, and frankly confessed, "For my part, I have a wife who has been pregnant for twenty times, and has given me twenty children born favorably at term; and I am persuaded that the caresses of the husband do no harm." Modern writers on obstetrics do not seem to think the matter worthy of their consideration.

Nevertheless, the fact that abstinence from sexual intercourse in pregnancy is the common rule of animals is certainly a strong argument in favor of urging similar abstinence on the part of the

¹ *Dr. Alex. Mayer: Des Rapports Conjugaux. Paris, 1868.*

husband. Pregnant women, it may be added, very rarely have a desire for coition ; nay, oftentimes, while submitting to it, they even abhor it.

But the strongest argument of all against the indulgence is, that it is so frequently the cause of abortion. At least fifty per cent of the cases of spontaneous abortion are thus produced, to say nothing of the increase of leucorrhœa, nausea, and vomiting of the early months engendered by the same cause. Summing up the arguments, then, against coition in pregnancy, we have abhorrence, suffering, and pain on the part of the wife, and, in regard to the newly created being, threatening murder.

It may be said, on the other side, that the chastity of the husband and the peace of the family are secured by the indulgence. If right be right, and wrong be wrong, what sort of an argument is this for sober-minded, sensible, and chivalrous men? If Newton, Kant, Fontanella, and Beethoven could live their many honored years with no indulgence of sexual passion, surely other *men* might abstain a few months without injury. "This ungoverned passion of man," writes Dr. Parvin, whose thoughts on the subject are so aptly expressed that we must borrow largely from them, "is prolific of evil ; and, like producing like, the father who never has learned self-control may give his son not only form

and feature, but the germ of the same fierce, clamorous desire which in its full development will prove a heritage of woe to that son and others. That which polite language veils under the designation *social evil*, and which desolates so many happy homes, and brings its quick, black harvest of misery, remorse, disease, and death, chiefly lives because man does not know aright, does not duly reverence and honor women, and keep in subjection that which may become one of the master-passions of his heart, and is thus continued from generation to generation."

Around the wife the protecting arm of gallantry and respect should ever be thrown. The woman who has conceived is *enceinte*, — that is, ungirdled, — in allusion to the ancient custom of laying aside the girdle when pregnant and placing it in the temple of the gods. While in this condition she needs all human care. Nature then offers to man invitation and opportunity to subordinate passion to reason, to conscience, to will, to a higher love, and thus to raise himself above himself. The excuse of the sensual husband, that intercourse facilitates parturition, that it can now be indulged freely and without fear, for matters can be no worse, — such an excuse is sheer folly: no sensible woman should tolerate it.

We are well aware that we have touched upon a

question about which dispute might be endless. It is equally evident that the popular vote is on the side of the indulgence, and that most physicians, too busy with actual disease, do not examine the sexual relations in connection with health and happiness enough to give instruction, such as is needed by all people. For one, we think total abstinence from coition during pregnancy is the rule of nature ; that the self-control, the self-mastery, on the part of the husband is with him a duty, with his wife a rest and relief, and for his prospective offspring an eternal gain.

Whether we judge from observation, from the great doctrine of evolution which so fascinates the age, or from the power of divinely revealed truth, the conclusion always is, that the world is growing better, and that a wiser, higher, happier, nobler generation will one day possess the earth. Every evil pointed out, every wrong discovered, helps on the progress to that day ; although it may be long before the evil and the wrong shall cease.

The keynote of the warning which Dr. Parvin has sounded, and which we reiterate, may be only the voice of one crying in the wilderness : even thus, as in times of old, many will hear. We have already recognized the teachings of the older physicians. Who will deny their accuracy, and that —

“ Truth, crushed to earth, shall rise again ;
The eternal years of God are hers :
But error, wounded, writhes in pain
And dies amid her worshippers ” ?

CHAPTER IX.

THE PREVENTION OF CONCEPTION.

WE are now forced to the consideration of a subject which at the present time is being agitated and discussed not a little in the medical press, and which at all times is one which should be looked upon as of the greatest importance. We refer to the various attempts made to prevent conception.

Granting that it is a weighty topic, it is yet one which few physicians have been bold enough to examine in all its bearings, and to decide upon publicly ; though it is to be feared that, privately, many men "in regular standing" have not hesitated to give it their indorsement, and even to suggest to their patients the means for its accomplishment. We feel quite sure that we could mention the names of several gentlemen whose public profession of faith on this subject does not tally with the advice which they are wont to offer within their private domains. If this be not so, is it unreasonable to suppose that the knowledge of the laity in such a matter exceeds that of the profession?

To whomsoever attempts to reflect upon this

theme, one fact at least presents itself. It is this, that, while the amorous instinct has lost none of its intensity, the objection to its natural and legitimate outcome is apparently year by year becoming more and more pronounced, until now the death-rate in purely American families fully equals the birth-rate, — the increase in our population being due to immigration and to births among the foreign-born. We know it to be a fact, also, that physicians are daily beset for advice, as to the best means of preventing conception, by women who are the leaders both in society and philanthropy, and even by some, too, who are lights in the Protestant churches. To the honor of the Roman-Catholic Church, its members are not so much given to the criminal and more or less reprehensible practices resorted to to effect the desired purpose.

Two inquiries naturally arise in regard to the subject. First, Is it *right*, or *wrong*, to prevent conception by any means? Second, Is the practice ever likely to result in injury to the woman?

In answer to the first question, it may be said that the *right* to resort to such an attempt is one which each person can and must decide for herself; since it is one which pertains to religion, morality, and sociology, rather than to medicine. It is a feature of the subject, however, which is pressing upon *the attention* of the American people. It is a vital

feature, because, if the prevention of conception is ever justifiable, then have we a perfect right to know it ; and if it is always wrong, and is in conflict with a strict morality, then surely we *ought* to be so informed. The question is one, it is often said, for the churches to take hold of. We fail to see why it is the duty of the churches any more than of the medical profession, if it is equally true that the guardian of the body is a co-worker with the guardian of the soul. If the practice, by innocent means, to prevent conception is *morally* wrong, both clergyman and physician should say so, and not only say so in language that is not gingerly or liable to be misunderstood, but bring forward the *reasons* in such a manner as shall carry conviction to the mind of every woman.

The arguments which have been put forward to justify prevention are not strong enough in any sense to prove its morality. Indeed, very many of these are among the fatal maxims daily scattered in society, — the outcome of the tendency to rank the sensual above the spiritual, the present above the hereafter. In the name of a false science, it has been maintained that populations cannot continue to increase, because the alimentary substances do not increase in the same proportions ; that it is necessary, consequently, to restrain generation, to limit the family, to hinder, above all, or retard the mar-

riages of poor persons, in order not to arrive at a scarcity, and not to augment pauperism. On the other hand, luxury increasing more and more, and beyond the limits of fortunes, individuals, looking too much to the future, have wished to limit their progeny to their resources, in order not to divide up their revenues too much, and scatter their riches. To these pseudo-arguments we may add the weakening of religious beliefs and practices. Religion; whose moral prescriptions are in perfect harmony with the laws of nature, with the teachings of physiology, with the rules of hygiene, proscribes severely every species of fraud in the accomplishment of the generative functions. But this precept is not listened to; for the vacillating reason of mankind seeks to substitute itself for the views of Providence, but seems to forget, that, in order to successfully defy the immutable wisdom of God, it must previously reconstruct the grand laws which rule the universe.

The arguments which we have just quoted, and which, as we have remarked in the beginning, are based on a false science and on a ridiculous presumption, will not then avail any thing in an endeavor to uphold the *moral* status of the prevention of conception. On the other hand, it is not difficult to prove that each and every attempt to *frustrate* the ultimate end of coition is immoral in

the highest degree, and only sows the seeds of domestic ruin and death. In the first place, the practice is immoral because it is a fraud, and deception is always wrong, — a most culpable fraud, for the reason that it frustrates nature in the guaranties upon which are based the perpetuity of the human species, and renders illusory the most important of all functions. There is a certain motive “which,” as Mayer says, “should solicit a husband to obey the law by virtue of which the race is perpetuated, — *first*, the attraction of pleasure ; *second*, the sentiment of paternity. If the latter be wanting, the first will still be efficacious. But if he should cheat, and no further security should exist, the race will run the risk of becoming extinct. Then this element, so powerful in the order of the universe, would be found abandoned to the hazards of a free will, and would produce a dangerous conflict between the interests of the individual and that of his species.”¹

Further: the practice is immoral, because it tends to annihilate all the physical and moral sympathies, the reciprocal attachment so indispensable to a happy marital union, and to give rise, in their stead, to coldness, indifference, and disunion. Why need we fear to go to the bottom of things, and refuse to discern the effects of this festering wound?

¹ Mayer: in work previously cited.

Concentrate the mind upon any husband and wife who are in the habit of violating the sanctity of the conjugal alliance, and of profaning chastity by their intimate acts, and answer, Have they any respect for each other? Is the husband not losing his prestige of honor, and the wife her purity of heart? Ere long the changes in their moral relations will be noticed by their friends. Little by little will come on disaffection, indifference, contempt; then bitterness, resentments, which, increasing one upon another, bring about those scandalous ruptures,—those dark and dreadful dramas of adultery,—so frequent in our day and generation. This young wife, but lately so innocent and so chaste, who has been polluted by such immorality, will soon know the ingenious stratagem invented by debauchery. Then, if seduction seizes upon her heart, if her virtue fails, she will know that she will be able with impunity to violate the conjugal faith. What will the husband say then? For he it is, probably, who will have taught the wife the art of cheating nature,—and of cheating himself!

But we have said enough of the moral standing of this practice. We have endeavored to prove that the prevention of conception, being fraudulent on nature and on self, is morally wrong,—that it is void of Divine sanction because it sets at defiance a Divine law; and that to marriage it

opposes a shadow, a plague, which, festering day by day, finally causes its ruin and death. This is our opinion, our best judgment, not as a physician nor as a clergyman, but as one among many who are not entirely unblessed with common sense. But some one will say that there can be no rule, even in morals, without exceptions ; and that there must be times, circumstances, or parental conditions which would both justify and require a departure from Nature's general plan,—in other words, that it is *occasionally* right to prevent conception. We frankly believe that such is the case ; and that, while in a general sense the practice is wrong, there will now and then happen cases in which prevention is not only right and proper, but equally imperative and necessary. But we verge here upon the *medical* aspect of the problem, which we go now to consider, first, in a general sense.

Says Dr. Thomas,¹ " Means established for the accomplishment of the prevention of conception are *often* productive of uterine disorder. This will not be wondered at when the harshness of some of them is borne in mind. The workings of nature in this, as in all other physiological processes, are too perfect, too accurately and delicately adjusted,

¹ T. Gaillard Thomas, M.D.: *Practical Treatise on the Diseases of Women*. Philadelphia, 1880.

not to be interfered with materially by the clumsy and inappropriate measures adopted to frustrate them."

Dr. Goodell writes, "The wife suffers the most, because she both sins and is sinned against. She sins because she shirks those responsibilities for which she was created ; she is sinned against because she is defrauded of her rights. Lawful congress completely performed so far satisfies an imperious instinct that attendant local congestions are at once relieved, and to great nervous excitement succeeds a calm repose of body and mind. On the other hand, conjugal onanism provokes in her desires which keenly solicit that very gratification which is denied by the nature of the act. The excessive stimulation of the whole reproductive apparatus remains unappeased. A nervous super-excitation continues, which keeps up a sexual excitement and an over-sensitiveness of the parts. Hence the congestive orgasm of the vagina, womb, oviducts, and the ovaries, does not at once pass away, but persists for some time,—perhaps is not wholly effaced before another incomplete coition brings a fresh instalment. Thus arise engorgements, erosion, and displacements of the uterus, and inflammation of its appendages, accompanied, of course, by all those protean mental and physical *manifestations* which I have so often pointed out

to you. She takes distorted views of life and of the marriage relation, and harbors resentment against her husband as the author of all her ills. . . . Again, — for the ill effects of such practices accumulate, — the very barrenness aimed at by these criminal expedients is in itself a source of disease. In sterile women the absence of pregnancy prevents a break in the constantly recurring menses, and the physiological congestion of the womb by ceaseless repetition is liable to become pathological. Add to this the unrelieved congestions arising from incomplete intercourse, and a prolific source of uterine and of hepatic disorders is at once manifest.”¹

These are the opinions of two of the most eminent physicians and teachers in this country. They have no uncertain sound: they carry with them a warning which it were rash folly to disregard.

In a previous chapter we have affirmed that the sexual act has not alone for its end the generation of beings, but that it also tends to bring about a unification in the nature of the couple, — that the semen does not only fecundate the ovum of the wife, it fecundates the woman herself. By falsifying coition, by provoking unsatisfied desires and incomplete sensations, the artifices introduced into the conjugal act often lead to a profound perturba-

¹ Dr. Goodell? in work cited *ante*.

tion in the genital apparatus of woman. The uterus enters into a state of excitation and congestion which is not appeased by the natural crisis, by the contact and lubrication of the seminal fluid: the over-excitement persists, and is perverted. There comes to pass then just what will take place, if, after having presented food to a starving man, it is suddenly withdrawn from his mouth after having excited his appetite. These super-excitations, not being calmed, determine little by little grave disorders in the uterine innervation, the starting-point of varied, multiple neuroses, of cramps, strange hysterical affections, which torment in a cruel manner, and without relaxation, so many married women. The following is one case, typical of **many** that almost daily come to the knowledge of a physician actively engaged in treating the diseases of women:—

Mrs. B——, aged thirty-one, of a nervous temperament; while young was afflicted with hysteria, but was advised to marry early, which she did at nineteen; has had three children, and suckled them, within six and a half years. Her husband, fond of the pleasures of society, wished to limit his progeny; so, after the birth of the *second* child, began to practise the conjugal duty in an abnormal manner. The wife submitted to this reluctantly, “*in order to keep peace.*” The birth of the third

child — which proved that prevention does not always prevent — was followed, in the wife, by violent pains in the lower part of the bowels, which resembled uterine cramps : none of these were attributable to labor, which was both easy and normal. Every intercourse with her husband aggravated the disturbance, until at length Mrs. B——, who had always heretofore shown herself passionate, now experienced a nervous irritation ending in complete disgust. She appealed to her physician, who at once recognized the cause, and sought out her husband, to whom he talked plainly, and counselled rational habits. The advice was heeded, and in less than two months Mrs. B—— was again a well woman.

A French physician, Dr. Bergeret, has published a work in which he reports one hundred and twenty-eight observations, set forth with details, and of which many are conclusive, to demonstrate the numerous ills produced by frauds in the accomplishment of the generative functions. These observations concord perfectly with our own investigations on this subject.¹

In order not to leave this topic vague, superficial, and unsatisfactory, we esteem it a duty to offer a few remarks on some of the *means* which many

¹ L. F. Bergeret: *Des Fraudes dans l'Accomplissement des Fonctions Génératrices*. Paris, 1870.

"good people" have confessed themselves to be in the habit of using for the prevention of conception. Our object in speaking of them at all is to make clear their injurious and uncertain character. We begin with the *worst* methods that are employed; namely, *the use of drugs*.

More than one woman has confessed to us, that, just before the expected recurrence of the monthly periods, she has been in the habit of dosing herself with nauseating and filthy concoctions in order to "bring her round all right." The mixtures employed were such as had been recommended by "good mothers-in-law," or even by mothers, who dreaded to have their daughters become pregnant. These fair young brides seemed not to be aware that such a procedure, instead of *preventing* conception, was rather influencing the probable result of intercourse: to speak more plainly, procuring abortion! of which, of course, they would not knowingly be guilty. And yet this is one of the most common methods for *preventing* conception. What is the sequence? Extreme nervous irritability, hysteria, dyspepsia in its most aggravated form, disease of the uterus, blood-poisoning, decline, and either insanity or death!

Another method in vogue, equally common, is the use of vaginal injections, either of cold water, or of water to which some acid or astringent has

been added. "It should require but a moment's consideration," writes Dr. Gardner, "to convince any one of the harmfulness of the use of cold ablutions and astringent infusions and variously medicated washes. Single and often wonderfully salutary and grateful as is cold water to a diseased limb, festering with inflammation, yet few are rash enough to cover a gouty toe, rheumatic knee, or an erysipelatous head with cold water. Nor would any mother dare to plunge her child into a bathtub when rosy with measles or scarlet-fever; nor, even in summer, when sweating with the simple heat of the sun, would she allow him to bathe himself. Yet, when in the general state of nervous and physical excitement attendant upon coitus, when the organs principally engaged in this act are congested and turgid with blood, do you think you can with impunity throw a flood of cold or even lukewarm water far into the vitals in a continual stream? These powerful astringents suddenly corrugate and close the glandular structure of the parts, and this is followed necessarily by a corresponding reaction; and the final result is debility and exhaustion, signalized by leucorrhœa, prolapsus, and other diseases." We may add to this list of evils a temporary cessation of the catamenial discharge, followed, before many days or weeks, by uterine hemorrhage, or "flooding." We are convinced

beyond question that such a condition is one of the most frequent and serious misfortunes engendered by the improper use of vaginal injections. Cases might be cited also — no less than *four* are reported in recent medical journals now lying before us — of even more terrible ills caused by ignorance in the use of these injections. There is scarcely a “female syringe” in the market that is properly constructed, and that is not well calculated by this error to cause an entrance of fluid through the uterus into the Fallopian tubes, — an accident which often results in a degree of pain almost causing collapse, and sometimes even inflammation of the peritoneum, or *peritonitis* as it is medically termed.

The use of warm water is equally harmful at such a time, since it removes the emollient seminal fluid in which the turgid organs are bathed after coition.

There is still another means often resorted to; namely, the *baudruche*, or “condom,” — a thin covering of rubber or goldbeater's skin, most frequently used by men of loose character as a guard against venereal disease. To our mind it only suggests the brothel or the den of prostitution; and too true is the remark of Madame de Staël regarding it, “It is a cobweb for protection, and a bulwark against love.” What must be the disposition of a *young wife* that would ever tolerate such a sham?

How can she avoid a feeling of shame and of disgust when she becomes conscious that her husband has himself discovered a tool of licentiousness, and, by its employment in the marriage-bed, is degrading her to the level of a mistress?

Of the use of the various kinds of pessaries, sponges, tampons, and the like, we shall say nothing. Though some of them have the sanction of high medical authority, we still believe that all of them are more or less productive of evil for reasons already explained.

The last method to prevent conception on which we shall offer any remarks, is one which, it is said, "is practised by almost every male in Paris, and all over the country." As it comes from Paris, it *must* be fashionable. At least we know that its adoption has spread even to this country! It consists simply in the withdrawal of the husband previous to the emission of the semen. Its success, therefore, depends solely on the power of self-control of the man; and, if there exist enough power, the method *must be* absolutely certain as a preventive. In our volume addressed specially to the male sex we have pointed out the injurious results of this method, and have no need to repeat them here. It is plain to see, that, for wives, it affords no advantage, unless disease, and possibly death, be so considered.

But enough of the means and methods. They

all trifle with the grandest function of the human organism ; and to resort to even the simplest and seemingly the most innocent is to "incur a heavy responsibility, and to run a fearful risk. It matters little whether a railroad train is thrown from the track by a frozen drop of rain or a huge bowlder lying in the way : the result is the same, the injuries as great. Moral degradation, physical disability, premature exhaustion, and decrepitude are the result of these physical frauds, and force upon our convictions the adage which the history of every day confirms that '*honesty is the best policy.*'"

One thing more, and we have done. It was formerly considered that there is a time in every month between the menstrual periods when conception is impossible, or, in other words, that conception is most liable to follow an intercourse which occurs just before or soon after a monthly period. However, the leading physiologists of to-day are as one in expressing the opinion that *conception may occur at any time* after puberty, and on to the change of life. Those of our fair readers, therefore, who have believed themselves "safe" by submitting to sexual intercourse only at stated intervals, should at once disabuse their minds of this erroneous notion ; that is, if they would avoid an increase of family.

Now, must come our answer to the question, Is

prevention *ever* justifiable? We have said that it was. There is found here and there a wife, who, by no fault of hers, has become the mother of a large family, who has never been able to suckle them, and whose health thereby has almost become wrecked, — so much impaired, indeed, that another pregnancy would probably jeopardize her own life. Again: a young wife, some time after marriage, discovers that the poison of syphilis is lurking in the blood of her husband, or that even her own system is infected with the traces of some dangerous disease. There is a just fear and a strong probability that conception will transmit an inheritance of the evil to the offspring. Lastly, the wife, perchance, is assured by competent authority, too late to undo her marriage bonds, that, by reason of a narrow pelvis or some other malformation, she can never give birth to a living child except at the probable sacrifice of her own life, though she may easily become pregnant. She, of course, lives continually in fear and dread.

Such are some of the cases in which a woman certainly has the right morally, lawfully, and physically, to prevent conception by means the least harmful within her command; or, in other words, it is her *duty* to remain childless. Undoubtedly, in two of the situations named the parties ought never to have married; but they have married, and it

were unkind, unrighteous, to advise separation so long as wedded life continues to be blessed by mutual love.

By such admissions and limitations there will be those who will say that we have assisted in making vice bolder, and have laid down a rule the abuse of which will increase unchastity among women. We deny the first assertion: we hope against the second. Suppose that such were the case: it might save some broken hearts, prevent some deaths by suicide, render impossible so many deserted children. Men ruin women, and go free; but the victims die a social death, and too often go down to perdition. Are some wives to be sacrificed that the unchaste may be curbed? We are writing for women in whom centre all pride, honor, purity, and virtue, — women who do not surrender themselves, except when the bestowal of the heart and of pledged faith have led the way, — women, finally, whose lives are worth the saving, even at the expense of tempting such as are already corrupt in heart to become profligate in act.

Far be it from our purpose to guide a single soul into error. In whatever light our words may be interpreted, we wish it to be borne in mind that we have written them, not without knowledge, deliberation, and forethought. Bad, morally and physically bad, and, *as a rule*, inexcusable, as is every attempt

to prevent conception, there is still a greater evil than this—a crime which deserves no name—stalking in every community. Blacker than the sky at starless midnight, more merciless than a demon, demoralizing, dementing, death-dealing, it has settled like the plague over many a happy home, and is slowly but surely sapping the life of countless matrons. Better, far better a hundred—nay, a thousand—attempts to prevent conception than one to procure abortion. Sooner *die* by prevention than to commit murder, and sink to a depth of infamy, of which Milton's rebel angels who fell nine days might be ashamed!

CHAPTER X.

THE CRIME THAT DESERVES NO NAME.

THE old Hippocratic oath, to which every physician in former times, before receiving his diploma or license to practise, was usually required to be sworn, pledges him never to be guilty of unnecessarily inducing abortion. Whether every physician of our time, professing honor, remains faithful to the spirit of this pledge, will perhaps be revealed only at the judgment day.

If there is any crime greater or more utterly repugnant than this one, we do not know of it. The man who slays another because of some insult that has been offered to himself, or because of some petty strife, of bitter hatred, or of a greed for gain, is indeed a murderer, and deserves the penalty for his offence. But he or she, who, in cold blood, without cause, destroys an unknown child, a relative, nay, a part of one's own being, — is this murderer too, or is it not a crime that has no name, and deserves none?

But seemingly few persons are aware that "the wilful killing of a human being at any stage of its

existence is murder," and, further, that the product of conception is in reality endowed with life from the moment of conception itself. "Many women," says Dr. Storer, "suppose that the child is not alive until quickening has occurred; others, that it is practically dead till it has breathed. As well one of these suppositions as the other: they are both of them erroneous."¹

Call it what we may, — abortion, infanticide, or whatever else, — it is not a new crime. Every nation in antiquity, both savage and civilized, was guilty of practising it. Among the Greeks there were even systems of philosophy which countenanced it; and such otherwise noble men as Plato and Aristotle advocated it, alleging that the child only acquired a soul at the moment when it ceased to have uterine life, and commenced to breathe: from whence, in their opinion, its destruction was not murder. We have shown heretofore that such a notion is entirely wrong.

In our day the crime, however, has become exceedingly prevalent. Over and over again have women, wearing fine clothes, of apparently high standing, and otherwise worthy to be accounted thoroughly respectable, though misguided withal, entered our office, and, after obtaining an interview,

¹ H. R. Storer, M.D.: *Why not? A Book for Every Woman.* Boston, 1875.

unblushingly requested us to "perform an abortion" for them! And the request was usually made with as much nonchalance as though they were ordering flour of the grocer, or meat of the butcher! We can pardon the poor girl who has loved well but not wisely, who has been deluded, betrayed, and then abandoned, and who is seeking now a means, reprehensible though it be, of hiding her shame and obloquy. She has our sympathy, even though society, friends, parents, everybody, will condemn her. But for the married woman, who wishes longer to serve the goddess of fashion, who is "going to Europe in the spring, and does not wish to be bothered by another child," or who has always a countless number of other apologies to offer, — for *her* to enlist in such a proceeding is simply abominable. And yet we find many such, who are as proud of their criminal abortions as they are of the glittering gems which adorn their persons. One woman confessed that she had submitted to "seventeen operations, — all but one successful." We assured her that her day would come. It has come : *she is dying in an insane hospital!* Another boasted of her *nine* abortions : she, too, has reason to lament her folly. She undertook to rid herself of another pregnancy. The operation failed ; and she gave birth to a child, shockingly mutilated, blind, an idiot, but living still !

But why is it that wives and mothers will stoop so low? Are they not daily reminded of the frightful consequences? and do they not know that abortion is a crime, not alone against the life of the child and the health of its mother, and against good morals, but that it strikes a blow at the very foundation of society itself? We must seek for some explanation.

We were called not long ago to one of the fashionable "apartment" hotels. Every thing grand in architecture, elegant furniture in every *suite*, but no sounds of childish laughter, no playthings on the stairway, no sunshine of youth anywhere. We interrogated one woman.

"How long have you been married?"

"Only four years, and it seems *awful long*."

"How many children have you?"

"Why, none, of course."

"Not one in four years?"

"Certainly not. Why, the thought of having a child frightens me; and I know I should die."

"The fear of child-bearing is no excuse, madam. Nature requires of woman this duty; and she, with the aid of science, has now rendered its accomplishment almost harmless, nay even painless. Of course, you have done nothing to forestall childbirth?"

"Well, *only once*."

She explained how it was, and was as innocent in her own eyes as was the germ which she had obliterated *in utero*. We interrogated another; and she had her reasons for not having had children.

"O doctor! you don't know me as well as I do myself. My health is perfectly awful, and I never could take care of a child. It would wear me out."

Nay, she was well-nigh worn out already. Hers was a history of premature marriage, endless parties and balls, constant dissipation of one kind and another, sexual abuse, repeated attempts to prevent conception, and *two abortions!* And yet we earnestly believe that this woman thought she had done right,—at least was guiltless of intentional wrong.

We have not the time to detail more of these life-histories. They, indeed, all hang by the same thread, are woven by the same loom, teach the same lesson. It is a most singular fact, that the higher the rank or station in society, the more gifted the intellect, the richer the mind, the more noticeable the refinement, the luxury, and the ease,—the more extensively rooted is this practice of abortion!

On the avenue, in a brown-stone mansion,—it may be a palace,—a girl, a wife, a mother, has become pregnant. She takes counsel with her friends and with herself. A carriage drives up to the entrance: a woman—none the less a hag, a

she-devil, because she is clothed in purple and fine linen, and sparkles with gems — gets out, and slowly wends her way up the broad steps, crosses the threshold, and sits down in an upper chamber. The “diagnosis” is quickly made, the “treatment” proffered and accepted, and the “doctor” departs richer in purse, but poorer in reputation. But the case does not do well: there is an episode in the narrative. Ere long the emblems of mourning are hung on the door. People wonder: the worldly wise keep their own counsel, and merely whisper the cause, — “Inflammation of the bowels.” Yes, reader, nothing wonderful, is it, that, with brown-stone mansions in which to practise, with such reputable women as patients, with lawyers, juries, nay judges, to pay the bills, the business of the abortionist thrives, and that certificates of death will lie?

But this is only one side of the picture: there is another. A shop-girl, with a pretty face, a graceful form, a confiding heart, is pursued by a Mephistopheles. He does not love her, and craves only her virtue: he steals it, and she becomes pregnant. Abandoned to herself, she maddens at the thought of her shame. She seeks assistance: she is directed by the newspaper to the name and address. Thither she goes, pays the price in advance, robbing herself of every dollar that she has in the world,

submits to an operation, and dies ! Her friends wonder why she is absent. By and by a mutilated body is fished up out of the river, or is found in some dense underbrush. The story leaks out : the detectives are put upon the track of the offender ; he is discovered, possibly convicted, more often discharged. If sentenced, it is only for a few years in the state prison, whence he finally comes out, and awaits another victim.

Such is life, a picture cast in varied tints, less lights and more shadows, abounding in deception. Every week we may read the mortality report in the paper, but it is wholly unreliable. One lady confessed that she had produced abortion upon herself twenty-one times. The twenty-second attempt caused her death, but the certificate reads "dysentery." Another young woman perished from the same cause, and the whole family, nay, the family physician, were aware of it ; yet the certificate reads "Bright's disease," — and so on, through hundreds of cases that might be named.

But let us pause to examine some of the dire effects of this nefarious practice. A great many women labor under the impression that to expel wilfully the product of conception is not only void of moral harm, but is not of positive injury to their health. A more irreparable error could not be imagined. That this criminal practice constitutes

a prolific source of uterine disease no one engaged in medical practice can for a moment doubt. So impressed with this fact are American physicians, that some years ago, at one of its annual meetings, the American Medical Association offered a prize for a "short and comprehensive tract for circulation among females, for the purpose of enlightening them upon the criminality and physical evils of forced abortions." The prize was awarded to Professor H. R. Storer of Boston for his most able essay, entitled "Why not?" from which we have already quoted in the course of this chapter.

Here are some professional opinions taken from other sources of authority.

Dr. Goodell writes, "Criminal abortion must be denounced by every physician, and that boldly, if he values the health and happiness of his fellow-creatures, and a clear conscience before God and man."¹

Says Dr. Tait, an eminent English gynecologist, —

"Of the cases of intentional wounds of the vagina, the most common are those in which the injury is done during an attempt at another offence, the procuring of abortion. This crime is becoming frightfully common in our manufacturing centres. The instruments employed in this nefarious practice

¹ Goodell: in work already cited.

are nearly always improper and dangerous, so that every now and then we find death occurring from a punctured wound of the vagina, injuring the peritoneum.”¹

We quote from Dr. Meadows:—

“There are serious dangers connected with abortion, especially when they are of frequent occurrence; for they generally lead to chronic inflammation and hypertrophy (enlargement) of the womb, to a relaxed condition of its fibre, and to a congested state of its mucous membrane, occasioning a variety of disorders in connection with the menstrual function, which may ultimately undermine the patient's health.”²

Dr. Lusk, in a recent work, writes no less emphatically. He says,—

“Death, as a consequence of criminal abortion, is especially frequent. In many instances the fatal termination is fairly attributable to the ignorance, the imprudence, or the wilfulness of the patient.”³

Professor Jardien reports, that, in thirty-four cases of criminal abortion, where their history was known, twenty-two were followed as a consequence by death; and M. Tardieu found, that, in one hundred

¹ Lawson Tait: *Diseases of Women*. New York, 1879.

² Alfred Meadows: *Manual of Midwifery*. Philadelphia, 1876.

³ W. T. Lusk: *Science and Art of Midwifery*. New York, 1881.

and sixteen such cases of which he was able to ascertain the termination, *sixty* women died.¹

It may safely be asserted, then, that criminal abortion is always attended with great risk to life, and that a larger proportion of women die during or in consequence of the operation than during or in consequence of labor at full term; and further, —

Criminal abortion causes a larger proportion of invalids among women, many of them for life, than natural childbirth. And still further, —

It is assumed by competent authority that that most dreaded disease, cancer, which so frequently attacks women at the so-called turn of life, is, in many instances, largely due to repeatedly induced abortions, occurring during earlier years.

These are facts which no intelligent physician ever denies, and which no one else can afford to look down upon with contempt. And why should not they exist? or why might it not be expected that any infringement of a simple and general law of nature would incur derangement, disaster, and ruin to the guilty party? Marriage, without children, acts like a slow poison on the constitution of most women. As Dr. Barnes very forcibly puts it, "In man the ejaculation of the semen ends his physiological duties; but a woman,

¹ T. Gallard: *De l'Avortement au point de Vue Medico-Legal*. Paris, 1878.

to complete the cycle of reproduction, must pass through conception, gestation, and parturition."¹

Among the evils which set the stamp of invalidism upon the lives of so many women, we may mention displacements of the uterus forwards, backwards, or downwards; chronic inflammation of the uterus, and the long list of neuralgic pains in the back, groins, thighs, and elsewhere; profuse and continuous leucorrhœa; severe and oftentimes serious irritation of the ovaries; acute, lapsing not unfrequently into chronic, peritonitis, with this in turn inducing abdominal dropsy. But are not these enough miseries? Does any woman in her right mind care to become more familiar with any one of them? Would you not prefer to abandon your society pleasures for a while, and to devote yourself to the preparation for childbirth, and afterwards to the proper nurture and care of its result, than to become the victim of ill health from a criminal cause, to grow old before your time, to lose all your beauty and your gracefulness of form and gait, and perhaps at last to settle down within the narrow precincts of your own chamber a confirmed invalid, bed-ridden, — nay, worse, the victim of a living death?

Once more we repeat it: a confinement has

¹ Robert Barnes: *Lectures on the Diseases of Women*. Philadelphia, 1878.

nothing of risk or danger that can be compared with any forced attempt to prevent it. Childbirth is a natural process, a duty incumbent upon all healthful women, the *object* for which they were created. In the words of Dr. Storer, "Not merely does nature prepare the appendages of the child and the womb of its mother for the separation that in due time is to ensue between them, it also provides an additional means of insuring its successful accomplishment through the action that takes place in the woman's breasts ; namely, the secretion of the milk. Though the escape of this fluid does not ordinarily occur in any quantity until some little time after birth has been effected, yet the changes that ensue have gradually been progressing for days, or weeks, or even months : for, as is well known, in some women the lacteal secretion is present before birth at times even during a large part of pregnancy ; and in all women there is doubtless a decided tendency of the circulation towards the breasts prior to the birth of the child, just as there has been so extreme a tendency of the circulation for so long a time towards the womb. It is indeed to take the place of the latter that the former is established, and to prevent the evil consequences that might otherwise ensue."

It makes no difference, then, by whatever means or methods an abortion may be brought on : the

danger is always the same. Even in miscarriages of purely accidental origin the patient runs a great risk, and not unfrequently loses her life. The same causes are usually present, — the sudden and untimely interruption of a natural process, the death of the product of conception, a large tendency to fatal hemorrhage, a profound degree of mental disturbance, the great liability to subsequent uterine or ovarian disease. The wonder lies in the fact that the mortality is not greater than it is represented ; and the only reason that can possibly be assigned for this is, that many victims of malpractice, foreseeing the danger which they have willingly but unwisely incurred, are, later on, attended by proper nurses and skilled physicians, who bring to bear all the resources of medical science to prevent a fatal termination. Even under the best treatment death cannot always be averted ; and then it is, that, in order to cover up a sin or thwart a scandal, the art of concealment is practised, and the world moves on as before.

But some women will say that criminal abortion may sometimes be safely borne by the system ; that there are a few drugs — pills, potions, or powders — which will generally expel the product of conception in the early months, and leave no injurious effects behind them. To this we reply that some *women have* aborted, and apparently suffered noth-

ing thereby ; but these are exceptions, which are of little avail to disprove the evidence of numberless cases to the contrary. People have been known to take excessive doses of poison, to pass through lurid flames, to be cast upwards by an explosion, to be fettered and hemmed in by a railway collision or a fallen building, and yet to escape not only with their lives, but without the smallest bodily injury. But this is not the rule that governs such accidents or emergencies : no person would be tempted by it to undergo such experiences. To apply this reasoning to the case in hand, because one woman has sinned and escaped unscathed, another woman may not flatter herself into believing that she, too, might be one of the fortunate and favored.

We shall not soil our page by specifying any of the means which misguided genius or sordid brutality has devised to bring this curse upon women. It is enough for us to say, that no drugs that may be taken into the stomach can possibly effect abortion, unless by the administration of a quantity sufficient to endanger life, and that the use of instruments is *invariably attended by the greatest peril.*

The question will be asked frequently, "Is there, then, no alternative but for women, when married and prone to conception, to occasionally bear children?" We have already suggested the answer by

saying, that *intentionally* to prevent the occurrence of pregnancy, otherwise than by total abstinence from coition, — intentionally to bring it, when begun, to a premature close, — is alike disastrous to a woman's mental, moral, and physical well-being. True, we know of some men who claim to have discovered an alternative: but they are not *men*, and their claim is not valid; for there is no difference between the immorality of the husband who forsakes his home for an occasional visit to a house of prostitution that he may preserve his wife from the chance of pregnancy, and the immorality by which that wife brings herself wilfully to destroy the living fruit of her womb. The first procedure is surely the preferable of the twain, but where is the *woman* that would countenance it?

In conclusion: What is the remedy? Whence shall come the power to stay this increasing tide of sin? How shall it be applied? Some will say that the Church must grapple with the iniquity, that ministers must oftener make it a theme for their sermons, that moralists must unbend all their energies to root it out. If criminal abortion is a sin, a vice, a disgrace to civilization, — and who will deny it to be such? — why hesitate longer to picture it in its true light? why preach so loudly and so forcibly against lying and blaspheming and stealing, *and so tenderly*, so delicately murmur against that

evil which degrades the highest and noblest creation of the Almighty, and bids defiance to the first and sublimest purpose of this creation?

Yes, there is need of the clergy in this warfare. Without their co-operation nothing productive of good can possibly avail. We have tried, in this chapter, to suggest some of the weapons—some of the physical arguments, as well as of the moral arguments—which must be employed. We leave it to them to know and act their duty, as becomes all true disciples of Christ.

There is need, too, of an increased interest and effort on the part of the medical profession. Family physicians, to whom are intrusted so many and so bitter heart-secrets, have it in their power to stop this nefarious business. On them rests a fearful responsibility,—a mission, regarding the fulfilment or negligence of which they will be questioned at the last great day. What shall be the answer?

Finally, every good, pure, virtuous woman must lend her ardor and her influence to the blotting-out of this awful habit. As mothers, they must be the companions of their daughters, acquaint them early of their dangers, caution them against their follies, and *train* them for the future that lies before them; and these daughters, as wives, should unceasingly remember that the height of earthly desire can only be striven for with earnestness, to

say nothing of attainment, *with a healthy mind in a healthy body.*

“Of the mother, by consent or by her own hand, imbrued with her infant’s blood ; of the equally guilty father, who counsels or allows the crime ; of the wretches who by their wholesale murders far out-Herod Burke and Hare ; of the public sentiment which palliates, pardons, and would even praise this so common violation of all law, human and divine, of all instinct, all reason, all pity, all mercy, all love, — we leave those to speak who can.” To you, reader, we stand only as a guide-post, showing whither lead the two roads. May you have the wisdom to choose, and the resolution to follow !

CHAPTER XI.

THE PHYSICAL PERILS OF AMERICAN WOMANHOOD, THEIR CAUSES, AND MEANS OF PREVENTION.

THE increasing prevalence of female diseases in this country is appallingly attested by the rapidly increasing literature on the subject. What has already been written and printed within the past twenty-five years would make a library of no inconsiderable size. Surely there is something wanting somewhere: somebody is to blame. Either the fashionable habits of womankind are going on from bad to worse, or the fashionable modes of treating these maladies are more than failures. There is no doubt that at least one-half of the ill health of our women is due to both of these causes.

It is barely possible that the peculiar organization of the sex has something to do with this. From childhood to age, as we know, there is a marked difference between men and women in their physical structure and appearance. There is a delicacy in the very bones of the female that contrasts singularly with the strong, hard, rough

skeleton of the male. With the same number of bones, arranged in the same order, and fulfilling the same offices, and moved by precisely similar muscles, influenced by nerves exactly like those in man, yet a woman is not a man. She is of mankind, and yet she is by herself. Though of a finer texture, and operated upon by subtle influences, regulated by a law of periodicity past finding out, she is really no more complex than a strong, athletic barbarian in her physical economy.

As a being, woman is not perfect; neither is man. The two constitute one; and that is a relation contemplated from the beginning by the power that fashioned them. Up to the age of puberty the developmental process was slow in both. As the brain enlarged in volume, the limbs strengthened, the muscles increased in bulk and firmness; but the essential organs in the economy of animal life remained quiescent for years. When the mysterious revolution took place that transformed the girl into a woman, then also dawned the era of disease, and all the unhappiness that goes with it. This may not be the history of every reader of these pages; and fortunate for them is it that the contrary is true.

But let us now consider some of the influences, which, in our present way of living, tend most *decidedly* to develop a predisposition to diseases

of the female sexual organs. We shall enumerate them in the order of their frequency of occurrence.

First, The neglect of out-door exercise and physical development.

Feet were intended for use ; yet there are women quite unwilling to exercise them in any other way than dancing. Some scarcely feel able to walk from a dressing-room to a dinner-table after completing an elaborate toilet. Elegant idleness cannot be persuaded that it is not vulgar to move about on one's feet. Airing in a carriage is genteel, and without fatigue. Says a writer on this point, "It kills some ladies, in court language, to exercise in any ordinary manner. This is a common complaint of very sensitive beings who were once chambermaids or milliners. To appear perfectly well is to acknowledge themselves rather plebeian. In their early days, glowing with freshness, vigor, and the best elements of a sound constitution, it was the good fortune of many who now converse most about remedies to have captivated a prosperous grocery-man, a thrifty tailor, or the rich son of a retired leather-dealer, who was accepted as a lesser evil than remaining at service. Exchanging a cot in the garret to become mistress of an elegant establishment on an avenue is not to be despised. Their husbands pursue the

tenor of their ways, multiplying goods and chattels, and becoming millionnaires, while their wives develop into model patients, patrons of music, the drama, art, select dinners, the opera, and tract-distributions to the poor. Before marriage thus advantageously secured, every close observer has known spirited young wives who could once run from the basement to the skylight without complaining: now cologne out of a vial would not revive their exhausted spirits. A few years of technical luxury, surrounded and enveloped in comforts and elegances to which they were unaccustomed in the elastic days of youth, and then they decline to an abyss of chronic indolence." At length, warm apartments, coal-fires, gaslights, late hours, rich food, the pride of wealth, the insanity of passion, wear upon them after a while: they break down; they become helpless and confirmed invalids.

Young girls while at school especially stand in need of healthful out-door exercise. But how rarely do they get it! Instead of this, "they are reared," says Dr. Thomas, "in the belief that such pastimes are hoydenish, unbecoming, and fit only for rough boys. Their hours of leisure are occupied by reading, music, drawing, or some similar light task; and an hour's walk every day is regarded as a degree of exercise quite sufficient for

the requirements of health. By this plan the mind is constantly kept in the thralldom of control, and chafes under the depressing influence of a never-ending surveillance."

Second, Overwork of the brain, and excessive development of the nervous system.

Before women attain their true position in this world, at least one mistake in their education will have to be rectified. As a rule, they are educated too much. Their ductile minds are developed prematurely, to the positive injury of their bodies, before they have fairly begun to live. This, too, is all wrong, and one of the causes of nervous irritability and excitability peculiar to women in the Northern States. It seems to be the opinion of many mothers that a discourse on astronomy, a lecture on transcendental philosophy, or criticisms on a musical composition tend to make their daughters accomplished. When they become wives they are at the mercy of servants, and their husbands are also, if they know nothing beyond providing bountifully for the comfort, honor, and respectability of their families. The truth is not always welcome ; but we must say that thousands of women are far too learned in some particulars to be of any use anywhere. They look with contempt upon those who have not had equal advantages for being made useless beings like themselves ; and yet, when

examined by the test of common sense, they have never contributed a new thought, or, with their accomplishments, enlarged the circle of human happiness. By such false methods of education — by giving more thought and attention to mental culture than to physical development — thousands of girls are becoming unsound women ; brilliant intellects are being dearly paid for by future invalidism. All around us we see women nervously excitable, slender, fragile, sharp-featured, and petulant, — all brought about by the blunder of mis-managed education. It may be genteel, but does it pay ? A gentleman of ample possessions and of excellent social position gave it as a reason why he did not marry, that he did not feel able to keep doctors and druggists continually under pay !

Third, The improprieties of dress are a fertile cause of uterine diseases.

The remarks of Dr. Thomas on this influence are so pertinent, that we reproduce them here in full : “The dress adopted by the women of our times may be very graceful and becoming : it may possess the great advantages of developing the beauties of the figure, and concealing its defects ; but it certainly is conducive to the development of uterine diseases, and proves not merely a predisposing, but an exciting, cause of them. For the proper performance of the function of respira-

tion an entire freedom of action should be given to the chest ; and more especially is this needed at the base of the thorax, opposite the attachments of the important respiratory muscle, the diaphragm. The habit of contracting the body at the waist by tight clothing confines this part as if by splints : indeed it accomplishes just what the surgeon does who bandages the chest for a fractured rib, with the intent of limiting thoracic, and substituting abdominal, respiration.

“As the diaphragm, thus fettered, contracts, all lateral expansion being prevented, it presses the intestines upon the movable uterus, and forces this organ down upon the floor of the pelvis, or lays it across it. In addition to the force thus exerted, a number of pounds, say from five to ten, are bound around the contracted waist, and held up by the hips and the abdominal walls, which are rendered protuberant by the compression alluded to. The uterus is exposed to this downward pressure for fourteen hours out of every twenty-four ; at stated intervals being still further pressed upon by a distended stomach. Corseting, lacing, and the wearing of tight and heavy clothing also produce a deleterious effect in quite another way.

“To a woman who has systematically displaced her uterus by years of imprudence, the act of

sexual intercourse which, in one whose organs maintain a normal position, is a physiological process devoid of pathological results, becomes an absolute and positive source of disease. The axis of the uterus is not identical with that of the vagina. How often do we see uterine disease occur just after matrimony, even where no excesses have been committed! It is not an excessive indulgence in coition which so often produces this result, but the indulgence to any degree on the part of a woman who has distorted the natural relations of the genital organs."

In a blaze of hygienic light, admonitions of the medical profession are unheeded, and death and tight lacing and all the figure-forming devices of fashion act in unison. A warning voice is lost in the distance when it refers to this subject. Not one mother in a thousand doubts the truth of what physicians proclaim in respect of this painful compression of the chest, and yet she permits the practice to continue. Great men — giants in any department of busy life, those who make the world conscious of their influence, those who quicken thought or revolutionize public sentiment, and leave the impress of their genius in the history of the age in which they flourished — were not the sons of gaunt mothers whose waists resembled that of the *asp* or the middle of an hour-glass.

Fourth, Imprudence during menstruation is a most prolific cause of ill health among women.

The following is not overdrawn : A young lady, habitually dressed as already described, is driven rapidly to the ball-room. Notwithstanding that she is menstruating, she dances until a late hour of the night, or rather an early hour of the morning, then eats a hearty supper, passes out into the inclement air, and rides a long distance home. This "exciting life" is repeated frequently through the season, and through other seasons that follow, until disease puts an end to the process. The immediate result of exposure during menstruation is most commonly an inflammation of the mucous membrane of the womb, which, once excited, will often go on for years, and, in time, end in other diseases.

Fifth, Imprudence during or after puerperal convalescence is productive of many cases of genital disease.

"After the expulsion of the embryo, either at full term or at any period of pregnancy, the fibres thus developed undergo a fatty degeneration and absorption, which has received the name of involution. In order that it may proceed with normal rapidity and certainty, perfect rest is essential. The woman who rises too soon, and resumes her usual occupations, while the lochial discharge

is still existing, risks the results of interference with it. Besides this, the uterus is much heavier than usual, and the additional danger of the induction of displacement is incurred by too early exertion."

The pernicious custom of tight bandaging after labor is another cause of disease among women. But it would require all the words in the language to make every woman believe it. We merely lay down the fact, and omit the argument.

Sixth, The prevention of conception and the induction of abortion are fruitful causes of uterine disorders.

We have considered both of these evil influences at length in an earlier chapter, and need not go over the subject again.

Seventh, Among other causes we may include marriage with existing uterine disease, insufficient food, and habitual constipation.

It remains for us to suggest some means for the prevention of the ills which we have named. To stamp them out wholly may be impossible ; but we can only hope to do our part.

First of all, women must be made to understand that "keeping up appearances" is not particularly conducive to health. To reach the desired end in this line necessitates the life-long, heart-wearying struggle with the needle : hence the endless cut-

ting and basting and turning. But one has a sewing-machine : yes, for intermittent work, doubtless, this very machine will save you both time and money. But woe to her who is obliged to operate it as a trade !

Another fact : woman must realize that she shines and thrives best in the home. Not that she should not go out as often as she may be pleased to do so, but that she should rid herself of that false and restless idea of philanthropy which forces her ever into "society."

Too much brain-work, with too little house-work, is another crying evil of our land. This must be rectified before all. As it happens now, daughters from the age of eight to that of sixteen spend most of their time either in the unwholesome air of the recitation-room, or in poring over their books when they should be at play. As a result, the skill of the milliner seems to be directed towards concealing the lack of organs needful alike to beauty and to maternity ; and the girl of to-day becomes the barren wife or the invalid mother of to-morrow. It may be fashionable to be stunted, deformed, pale, feeble, and unsound ; it may savor of delicacy to always be under the care of a physician : but to be healthy is certainly to be happier ; and, for a daughter to enjoy the gift of health, this should be the aim of every mother. At this time of life one ounce of sensible mother is worth a pound of doctor.

CHAPTER XII.

THE DISORDERS OF MENSTRUATION.

As a rule, menstruation begins about the age of fourteen ; though it may be deferred for two or three years, or may appear earlier without inconvenience. In any case, however, a marked aberration from the ordinary period of the first menstruation is to be looked upon as an indication of the tendency in one or other direction of two great classes of ovarian and uterine disease. For example, a premature appearance of menstruation, especially if associated in the after-history with a too frequent and too abundant flow, is plainly indicative of a condition of congestion of the organs which may lead to a chronic ovarian or uterine inflammation. On the other hand, a delayed appearance, with subsequent irregularity, infrequency, and scantiness of menstruation, is suggestive of the opposite condition, — a want of development of the organs.

When the menstrual flow does not occur at the regular period, although the other evidences of ovulation exist, and the patient suffers in general

health or of local pains, the affection is termed "obstructed menstruation." It has two forms, classed respectively as "retention" and "suppression,"—to either of which the term "amenorrhœa" has been applied by writers. In what is termed "retention of the menses," the blood is retained in the upper part of the vaginal canal by an imperforate hymen, producing, at the monthly periods, a sense of weight or heaviness, swelling, and often a dropsical condition of the feet and ankles at night, and a fulness of the eyes and face in the morning. The treatment is mechanical or surgical, and should be undertaken solely by a regular physician. When menstruation has once occurred, no matter how imperfectly, its very appearance establishes a fact in the economy of the patient which gives quite a new phase in her case, and fixes a date from which most important conclusions may be drawn in after-life. It should be borne in mind by mothers, that menstruation does not usually proceed with perfect regularity immediately after its first appearance. It may be suppressed for a few months, appearing at the end of the interval, and occurring afterwards in a normal manner. Perfectly natural menstruation consists in a flow which occurs at intervals of from twenty-three to twenty-six days, lasting from three to five days, accompanied by various sensations of uneasiness, but without positive pain, and

resulting in a loss of blood, which may vary greatly in amount, but which, outside certain limits, may be said to be abnormal. The number of napkins soiled during a menstrual period affords some indication of the nature of the flow ; but allowance must, of course, be made for the different habits of women, for some will discard a napkin when soiled to a much less extent than will others. In general, however, if a woman uses more than four or five napkins in twenty-four hours, or less than three, the discharge is abnormal. The whole number used during the period should not exceed fifteen, without the suspicion being entertained that the flow is excessive ; and, if it does not amount to ten, it is probable that menstruation is scanty.

Menstrual suppression is always a serious matter. In any young woman in whom menstruation has been completely established, and has occurred with considerable regularity, a sudden arrest of the external appearance of the process should be regarded as of momentary importance. After marriage, the first suspicion is, of course, that the patient is pregnant ; but this sign, as we know, is not infallible. Other causes may have been at work ; namely, colds, over-exertion, mental shocks, or some other incidental occurrence, which may give rise to the concomitant symptoms of headache, difficult breathing, and palpitation of the

heart, etc. In severe cases, also, there are cold extremities, a sense of fulness and heat in the pelvis, and a "rush of blood" to the head.

When amenorrhœa depends on obstruction, or, indeed, any condition other than that of pregnancy or debility, it may usually be relieved by hot fomentations to the lower abdomen, warm hip-baths, and hot foot-baths, and, if deemed necessary, the use of hot mint teas. When the suppression is occasioned by anæmia, a treatment that will restore the normal condition of the blood, and thereby re-establish menstruation, is called for. Such a case is almost always attended with obstinate constipation, for which prescription 10 is recommended. Among iron-tonics, nothing is better than prescription 4. The employment of the so-called "emmenagogues," as is popularly advised, is certainly injurious, inasmuch as they all produce congestion and irritation of the pelvis organs. Highly valuable, however, are copious injections of warm water, as hot as they can be borne, into the vagina, and against the mouth of the uterus, by means of a proper syringe. Not less than a gallon or two should be used at any one time, or less frequently than every other day.

A great many young women suffer from painful menstruation, or, as it is termed, "dysmenorrhœa,"

In mild cases the patient will suffer pain for only a few hours, but will be weakened by the succeeding hemorrhage. In severe cases the agony will be almost unbearable for several days. The most common cause or peculiarity of this condition consists in an inflamed state of the mucous membrane of the uterus, attended with a fibrinous exudation, not unlike that of croup or diphtheria. This exudation often hardens on the membrane, and is expelled in fragments, or in the shape of a sac, attended with bearing-down pains like those of labor. When the adhesion is very firm, the uterus will contract violently and spasmodically, and for hours or days the sufferings of the patient will be excruciating. In such cases pregnancy is almost impossible ; but, when it does occur, it usually cures the disease.

In the ordinary cases the following plan of treatment will afford relief: as soon as menstruation begins, — or, better, some hours before, — the patient should go to bed, and apply hot applications to the feet, abdomen, and back alternately. This should be followed by a rectal injection of prescription 11. If the injection be objected to, prescription 12 may be substituted. As a rule, opiates and stimulants should not be used. In some cases of dysmenorrhœa a malformation, flexion, or displacement of the uterus is the prime

cause. Here there is extreme danger, and the services of the physician should be sought.

When there is an excessive flow of blood at intervals which have somewhat the periodicity of menstruation, the patient is said to suffer from "menorrhagia." When the loss of blood occurs not only at the menstrual periods, but in the intervals, she is said to suffer from "metrorrhagia." Both of these conditions are indicative of a large number of functional and organic diseases of the uterus. Among the leading causes may be cited abnormal growths in the uterus, displacements, inflammations, retained products of conception, cancer, etc. Menorrhagia, and, more markedly still, metrorrhagia, if unchecked, may result in sterility, hysteria, dyspepsia, extreme emaciation, or even death.

The treatment in either case is both palliative and curative. The first object is always to check or control the hemorrhage; and this can usually be effected by the recumbent position in bed, by cold applications to the abdomen, and by the internal use of iced lemonade or other cold beverages. Should these measures fail, as they sometimes will, no time should be lost in seeking medical advice, especially if the hemorrhage be profuse, and the prostration of the patient is alarming. In summoning a physician from a distance, always forewarn

him of what has happened, in order that he may come fully prepared to meet the emergency. This advice may seem to be needless, but we have known despair and death to result from such negligence.

At the period of the appearance of menstruation, and at its decadence, special dangers await women, all of them due to their sexual functions, though some of them have only an indirect association with the pelvic organs. Thus, on the accession of those feelings of vague uneasiness or positive pain, we frequently find instances in which a dormant tendency to mental disease becomes roused into action; and acute mania forms one of the risks through which many young women have to pass at the period of puberty. In these cases the greatest distress is sometimes caused by the terrible form taken by the insanity, erotomania; and we have several times seen girls so afflicted indulge in gestures and language which puzzled us to guess how the patients became acquainted with them, the girls were so young; and had been so well brought up. As soon as any symptoms of sexual eccentricity display themselves in a girl at the age of puberty, she must be treated as insane; and we hold that this view is really the best and safest explanation of many cases of what looks like lust, and what is usually and unfortunately punished as a moral

offence. It must be borne in mind that in the descent of the whole scheme of creation the function of reproduction has been the field of the keenest and most unintermitting struggle for existence ; and, at the time of the physiological change which enables a young person to enter upon that dangerous battle-field, the tendency of his or her ancestry is almost sure to evince itself in one form or another ; and any error in this direction is to be held as not the fault of the individual, but his or her misfortune. The true preventive consists in what we think it to be the duty of every parent to give to every child, — instruction in the nature and purport of sexual functions, how they are to be used, and how easily they may be abused. If this were done, not only would sexual diseases be diminished, but there would be much less sexual immorality.

At the period of the so-called “turn of life” women are subjected to another set of risks, some of them directly, and others only indirectly, associated with their sexual functions. Most women cease to menstruate between the ages of forty-five and forty-eight, though they may have the change earlier. During this period, which is certainly the most trying that a woman has to pass through, the arrest of the regular clearing of the body, which has proceeded with more or less regularity for many years, is not to be borne without great strain upon

the nervous and circulatory systems. Thus she experiences headache, nervous depression, flushes of heat and chills, irregular and sometimes profuse menstruation, pains in the back, dyspepsia, or other functional disturbance. Not infrequently the nervous symptoms result in mental derangement, epileptic mania, and insanity. But the most terrible result is the tendency to the abuse of ardent spirits. This is a fact about which too much cannot be said. When a woman imbibes, she almost always does so in secret, and is influenced by some strong inducement. The cause will usually be some physical suffering, or some mental distress, or a form of climacteric insanity. We lay it down here as our firm belief, that women rarely take to strong drink from the mere love of it, or from convivial indulgence, as do men. This very taste for liquor is itself a manifestation of insanity, and should be met accordingly.

After the cessation of menstruation many women become very stout ; and, as this is first brought under their notice by a change in their figure, they are often unnecessarily alarmed by it. One will insist that she is pregnant ; another, that she is dropsical ; and still another, that she has a tumor of some sort. It is not the easiest thing in the world to convince such persons that the enlargement is due wholly to fat.

A chapter might be written, if we were so disposed, on the management of the period of the turn of life. But we doubt whether our readers would be any the wiser after perusing it. The less said and the fewer details, the better for the patient. What will favor health at any time of life — namely, proper diet, cleanliness, judicious exercise, and congenial associations — is still more needed at the climacteric epoch. For the relief of the subjective symptoms an occasional drastic purgative (prescription 13) and removal, if possible, from home at intervals are generally efficacious. Of course, any local derangements must be met by proper medical attendance.

A single word by way of concluding this chapter: The outlines of misery which we have delineated are not always the fault of the woman herself. What the girl is in early adult years, that will she be later on. She holds her physical life, her physical happiness, in her own hands. By heeding natural laws, obeying the mandates of reason, and living uprightly, she may usually secure health and comfort to a good old age. On the other side, by contending against nature, by vicious practices, by thwarting the ultimate end of marriage, she only sacrifices the future to a transient present, and stores up for herself an endless amount of suffering and heartache beyond all endurance.

CHAPTER XIII.

LEUCORRHŒA, AND WHAT IT SIGNIFIES.

No disease, or symptom of disease, in the whole category of female ills is so common as leucorrhœa, or, as it is more vulgarly termed, "the whites." Probably no woman ever goes through life without at some period, and for a variable time, suffering from it. It is only when it becomes annoying by its constancy, abundance, or irritating properties that it attracts attention, and causes the patient to seek assistance. In ancient days—indeed, until within only a few years—the affection was regarded as a disease. At the present time, however, the best authorities treat it as merely a symptom depending upon some local disturbance in the generative organs.

The fact that the affection is so common does not appear to make it the better understood by the sex. Indeed, a strange degree of ignorance prevails relative to its origin and nature. Let us endeavor to shed a little light on the subject by saying, that, as a discharge of mucus is a symptom of bronchitis or of nasal catarrh, so is it a symptom

of inflammation of the vagina and lining membrane of the uterus and Fallopian tubes. It is not always a sign of inflammation, however, and only becomes so when the discharge has grown permanent, profuse, and acrid. The seriousness of the condition depends also much upon its local origin. Thus it is important to know whether the discharge emanates from the uterus or from the vagina. If it be vaginal in its origin, it will usually have the appearance of a white, creamy, foul-looking fluid, and may continue such for a long time. If it proceeds from the uterus, it will have the appearance of a thick, ropy, and sticky fluid, closely resembling the white of an egg.

The direct causes of leucorrhœa are manifold. Briefly, any thing that will tend to throw the organs into a state of congestion, ending in inflammation or simply in retarded circulation, may create leucorrhœa as a symptom. Thus we find it resulting from a general bad condition of the system, from suppressed menstruation, from displacements, from excessive coition, from labor and prolonged lactation, and from a host of other and equally potent causes. According to its origin is the affection trivial or grave, and what may actually be slight at first may ere long prove to be most serious. There is no doubt, however, that any leucorrhœa, unless it be speedily checked, and its cause removed,

tends to go on from bad to worse, and to entail much misery on the individual. Especially is this true of uterine leucorrhœa, which so often results in sterility and chronic disease of the vagina.

There are some peculiarities about this affection which it is difficult to explain. For instance, it has often been observed that women living in towns and cities are more afflicted with it than those dwelling in the country. This is owing, probably, to the irregular occupations and excitements of city life as well as to the bad hygienic conditions which encompass it. Very many girls who do not menstruate properly are troubled more or less with the complaint; and others there are who rarely menstruate at all, but have a sort of monthly leucorrhœal discharge instead. How often, too, do we find young women afflicted with the discharge, who in every other respect seem to be the ideal picture of health, or at least never complain of feeling ill! But one should not flatter herself in this matter; for in too many instances the leucorrhœa is but the expression of a constitutional weakness, — a forerunner of an outbreak yet to follow. Again, leucorrhœa is very common in association with disorders of the digestive tract. Dyspepsia, flatulence, distension of the stomach and abdomen, constipation, and diarrhœa are frequently observed. To determine which was the antecedent disorder is

not always easy ; but this much is certain, almost all the dyspeptic women who have copious leucorrhœa, and in whom physicians are so ready to explain the leucorrhœa by the disorders of digestion, have uterine disease. As certain is it, also, that leucorrhœa rarely lasts any length of time without entailing dyspepsia and mal-nutrition.

We have been surprised to note the number of women who follow sedentary occupations, and in whom the bowels are almost always confined, that are troubled with leucorrhœa. Nearly every shop-girl, especially if she be doomed to stand much through the day, is of the number. As a result, we find many of these girls also afflicted with menorrhagia.

The leucorrhœa of young girls deserves the careful attention of mothers. The occurrence of a discharge being often attended with local irritation, the child is likely to resort to friction, or scratching, for relief. The redness and tumefaction thus added to the discharge are very apt to excite suspicions of foul play, and thus to lead to false accusations. It is therefore in the last degree important to bear in mind the conditions under which leucorrhœa in children may arise, lest we too hastily adopt the suspicions that may be suggested to us by others.

We come now to speak of the proper treat-

ment of this complaint. We are often asked, Can leucorrhœa be readily cured by the woman herself? Certainly. Call it what we may, the affection is loathsome, and no one is more aware of this fact than the patient herself. What wonder is it, then, that so many ladies hesitate to seek medical advice? The doctors are much to be blamed in this matter; for they have done more, as a body, to enshroud the affection in mystery than the few can possibly hope to do to render its origin and nature understood, and the means of cure equally plain. But this is true as regards about every disease to which the female body is heir: otherwise one might suppose that in these degenerate days women have more need of doctors than they had in the olden time. It is fashionable to have a complaining vagina, uterus, and ovaries, and to have frequent examinations by hand, by speculum, and abdominal palpation, and no end of applications. It is one of the accursed evils of the time that women seem to have grown fond of this thing, that doctors have grown fond of it too, and that the profession of the so-called "gynecologist" has become spicy and lucrative. We find no fault with physicians who honestly strive to thoroughly acquaint themselves with the serious ills peculiar to women, — too much study cannot be devoted to this theme, — but with those self-appointed and

self-anointed gentlemen who assume great powers, settle down in luxurious offices, and attract attention by the high-sounding titles and profound mysteries with which they surround their professed knowledge and skill. If there had been a race of gynecologists in the days of Molière, what sport he would have had with them? Women had vaginas, uteri, and ovaries then as well as now; but they had also a natural use for them, and as yet the "gynecologists" had not made the grand discovery.

We are free to say, that, if half of all the specula were fed to the fishes, womankind would be very much better off, though there might not be so much brain-food in a fish diet. Not that a speculum cannot be used with advantage in some cases, but the abuse is far greater than the use. Some years ago a learned doctor proposed to cure all diseases of the larynx, and some of the trachea and bronchi, with a local application of nitrate of silver; and the medical profession accepted the crude idea as if it were Bible-truth. To-day none but the most credulous believe the story. Not long after, somebody else proposed to cure many, if not all, of the diseases of the female sexual organs with a local application of nitrate of silver; and, lo and behold! a crop of gynecologists rose up to make the most out of the maids, matrons,

and grandmothers of civilized lands. Thus it happens that thousands of women have been doomed to undergo the nitrate-of-silver treatment — their mental agony and physical torture were accounted nothing — in cases where soap and water and a gentle placebo would have been amply sufficient. Cleanliness is next to godliness even in this region.

Now we have digressed so far merely to emphasize the assertion, that at least ninety-eight per cent of so-called diseases of women can be cured by proper internal remedies, cleanliness, and good hygiene ; and, furthermore, it is our humble opinion that at least fifty per cent would never be heard of if these diseases were not the fashion, and physicians were not wanting to make them more so. Only recently we have had a few cases which illustrate this fact. In one, a gynecologist had been operating, with all the skill at his command, for six or seven months, and for no other reason, so far as we could detect, than to perpetrate a gross fraud. In another case, a young married woman, brought to us by a lady who had been uterus-mad for years, was found to have absolutely no disease at all, but was simply ailing a little on account of overwork caused by operating a sewing-machine too steadily.

The reader will understand, from what we have just said, that we place no confidence in any of

the senseless and harsh means which have been suggested for the cure of leucorrhœa. Far better do nothing at all — at least, to use soap and water only — than to be guilty of such conduct. At the same time we firmly believe in a systematic treatment of this affection.

The first step is to discover the cause. By remembering what we have said relative to the varieties of leucorrhœa, it will be comparatively easy to decide upon its origin. If there be an immediate cause, and this cause can be detected, due efforts should be made to get rid of it; if the cause be hidden, — at least, if it be not a ready matter to explain it, — it will be safe to adopt the conclusion that a general constitutional treatment is called for.

To begin with, then, any thing that will tone the system generally, that will strengthen the dilated blood-vessels of the mucous membrane, — such as some mild preparation of iron, Peruvian bark, salt-bathing, a change of air and scene, and the substitution of cheerful and social influences for those that are exciting and depressing, and, last but not least, good, wholesome diet, — these will all prove efficacious in a great number of cases. Especially valuable as internal remedies are prescriptions Nos. 4 and 14.

As a local measure, a vaginal injection of a

least a pint of hot flaxseed or of slippery-elm tea, to which quantity ten or twenty drops of the fluid extract of hydrastis have been added, once a day, until the inflammation has subsided, will certainly afford greater relief and comfort than the oft-suggested astringent infusions of tannin, oak-bark, zinc, etc. As the case weakens, a vaginal suppository, containing five grains of iodoform, should be used twice daily.

Many cases of leucorrhœa — slight ones, of course — yield readily to simple and oft-repeated **in**jections of hot water, to which a little — ten drops — carbolic-acid solution has been added. The hot water serves as a tonic to the irritated mucous membrane, and the acid is antiseptic, and prevents fungous growth. On the other hand, cold water, in every form, as full baths or hip-baths, produces the best results. It is indeed the best preventive and the best tonic for this complaint.

Should leucorrhœa fail to succumb to this mode of treatment, — and it is safe to say that fully three-fourths of all cases will, — it will be proper to conclude that the counsel of the physician is needed, and this, too, without further delay. .

CHAPTER XIV.

THE DISPLACEMENTS OF THE UTERUS.

WHOLE volumes have been written on this subject alone. In the narrow limits of a single chapter we cannot hope to exhaust the theme, or even to present all the more important features which suggest themselves to the mind of a physician. We shall endeavor, therefore, simply to single out the salient points, so far as they may interest, or the knowledge of them may benefit, the reader.

The normal position of the uterus in the pelvic cavity has already been explained. We have now to briefly consider its various deviations from this natural position. The uterus may be displaced downwards, forwards, backwards, and may even be partially or completely inverted. It is thus evident that its natural supports may at times prove unavailing. Let us for a moment examine these supports.

The principal support of the uterus is by the attachment of its neck to the upper part of the vaginal canal. It rests in a measure on the upper part of the vagina, assisted somewhat by the vari-

ous ligaments to maintain its central and upright position. But the uterus is not fixed in this position: on the contrary, it floats loosely in the pelvic cavity, limited in its motions by the attachments and ligaments just mentioned. This movable condition is essential for the purposes of gestation; for during pregnancy the organ is developed to six or eight times its non-pregnant length and breadth, and rises up in the cavity of the abdomen to the navel, enclosing a foetus weighing at full term six or eight pounds. Whatever will increase the weight of the organ, or press it down from above, or relax the vaginal canal below, or in any manner weaken the adjacent muscles, must necessarily tend to cause a displacement of the uterus.

The predisposing or exciting causes of uterine displacement are numerous. Sedentary habits, by weakening the whole muscular system, frequently give rise to the condition. Habitual constipation, occasioned by a disregard of the laws of diet, eventually sets up an inflammation of the mucous membrane of the vaginal canal, followed by a leucorrhœa and a relaxation of the structures, and more or less displacement of the uterus downwards. The fashionable modes of dress, tight lacing, the wearing of heavy skirts and over-garments, and their pressure about the waist, all tend to crowd the bowels downwards and to force the

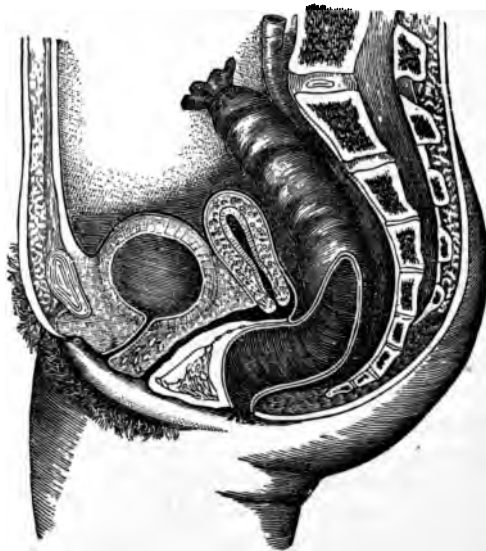


Fig. 9. — NORMAL POSITION OF THE UTERUS.



uterus out of its normal position. We do not believe that any woman who continues to "dress fashionably" for many years, especially if she has begun to follow the prevailing mode before maturity, can possibly avoid having, sooner or later, a displacement of the uterus. Ridicule this assertion, if you choose; deny its accuracy, if you can: the fact remains the same; but the lesson will probably pass unheeded. Another cause of displacement is found in the injudicious use of emmenagogue medicines, such as savin, rue, tansy, iron-mixtures, aloes, etc. These all occasion congestion of the organ, and often induce hemorrhage, which is mistaken for menstruation. If they are frequently repeated, — and some women take iron for months or years, — the result is permanent congestion of the uterus. The organ becomes so engorged with blood that it soon settles down little by little, or tilts forwards or backwards, or even bends on itself, or protrudes externally. We may mention other causes when we come to speak of the several forms of displacement.

ANTEVERSION.

This disorder of position consists in an inclination of the uterus forwards, as shown in the accompanying diagram. The most frequent causes are parturition, enfeebled muscular condition, habits

of indolence and inactivity, and loss of strength in the abdominal walls.

In some cases the anteversion may exist without creating any local or constitutional disturbance, but this is not the rule. In most instances dysmenorrhœa and sterility are present, and the bladder is irritable, engendering pain and a constant desire to pass water.

Mechanical means alone will, after the cause has been removed, cure the displacement. The physician will determine what and how it must be applied.

RETROVERSION.

This disorder consists in a tilting of the uterus backwards. The annexed cut illustrates it. The predisposing causes are the same as those named above: the exciting causes include especially tight and heavy clothing.

A woman suffering from this form of displacement is subject to severe backache, leucorrhœa, dysmenorrhœa, nervous prostration, menorrhagia, and pelvic neuralgia. She walks about with great difficulty, and is more disposed to remain in bed. Her appetite is poor; she craves every thing, but nothing "tastes good;" and there is a constant tendency to flatulence and gastric irritation. At times she complains of tenderness and a sense of

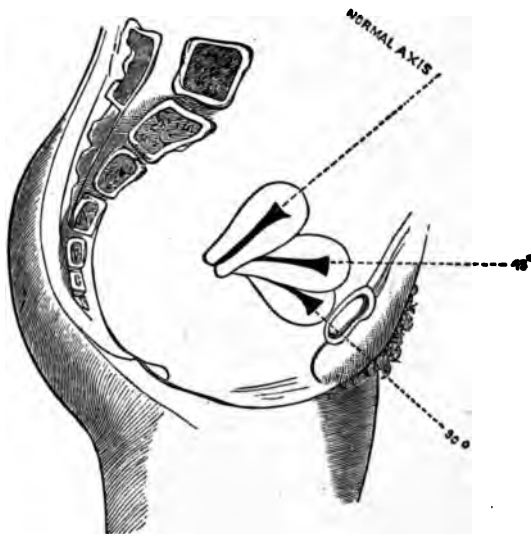


Fig. 10.—ILLUSTRATING THE VARIOUS DEGREES OF ANTEVERSION OF THE UTERUS.



heat in the region of the uterus, and again of uterine colic. Indeed, the patient is truly a miserable, sorely afflicted woman ; and, if she be not blessed with a hopeful disposition, she will settle down in complete despair. Such cases are deserving of all pity or sympathy ; but, alas ! they rarely get it.

The management of a case of retroversion is no easy task, and should of course be relegated to the physician.

PROLAPSE, OR FALLING OF THE UTERUS.

The name applied to this disorder is its best definition. It is of very frequent occurrence, and justly constitutes for women an object of especial dread. As almost all women, after the period of fruitfulness has passed, have an intuitive fear of cancer of the uterus, so do a large number before that time manifest an apprehension of falling of the uterus. In the one case the anxiety is for life ; in the other, for usefulness and comfort.

This displacement may occur suddenly and unexpectedly, or gradually and by successive steps. The last type is the more frequent. The causes leading to it

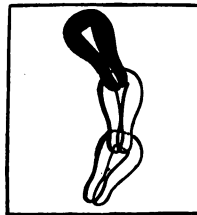


Fig. II.—ILLUSTRATING THE UTERINE AXIS IN THE THREE DEGREES OF PROLAPSE, OR FALLING OF THE UTERUS.

are child-bearing, laborious occupations, advanced age, and habitual constipation. In women who have never borne children the displacement is very rare ; but we have known of its occurrence in young unmarried women.

The most prominent of the symptoms are a sensation of dragging and weight in the pelvis ; an irritableness of the bladder and rectum ; pain in the back and loins ; great fatigue from walking ; an inability to lift heavy weights ; and leucorrhœa and other local manifestations. As a rule, there is no menstrual irregularity or disorder.

Prolapse of the uterus, whether it be partial or complete, is unlimited in its duration, and, unless relieved by art, will continue indefinitely. It impairs the general health, and sooner or later renders the patient unfit for work of every kind. It rarely has a fatal termination, unless by exciting inflammation.

The treatment is by the use of pessaries, supporters, etc. Of these we shall say something later on.

The above constitute the principal forms of displacement of the uterus. Another form — inversion — is exceedingly dangerous, and happily very rarely met with. So rare is it that we need not speak of it.

The uterus is subject to certain deformities, which are often spoken of in connection with displace-



Fig. 12. — RETROVERSION OF THE UTERUS.

ments, and too often confounded with them. These are termed "flexions." There may be ante flexion and retro flexion, which means the bending of the uterus upon itself forwards or backwards respectively. These conditions are very common, and demand the best surgical treatment that can be obtained.

As we have before remarked, the treatment of all forms of uterine displacement are almost wholly mechanical. While it seems unnecessary to branch off into details of this means of relief and cure, we are led to say a few words regarding what are termed "uterine supporters" in general. Not unfrequently we see an advertisement of some one or other of these contrivances displayed in the newspapers. Almost every medical journal contains the same seductive emblazonment, and invariably with the characteristic "quack" testimonials. One enterprising fellow, who manufactures a series of uterine supporters, and thus provides for all forms of displacements, states, in his flaming advertisement, that the "recent graduate need only to raise a bed-ridden retroversion, or any other displacement in which former instruments have failed, and his foundation of success is laid." We quote this as a sample of the impertinence and shamelessness of certain doctors — in this case a veritable M.D. — who are struggling to get a living. But what shall

be said of the numerous "recent graduates," who, lured by such inducements, do not scruple to inflict the clap-trap supporter on some of their patients? We say "inflict," because we have never heard of their use being followed by success, but have seen many cases where injury followed their application. Recent graduates, it must be said too, are not the men who are best fitted to manage a case of displacement. They may have the knowledge, but lack the experience which is every thing in such disorders. Further, one who would be governed by the consideration, set forth in the advertisement of the manufacturer of supporters in a choice of the remedy proper for a case of displacement, ought not to be trusted at all, no matter what the illness may be.

Let it be understood, then, that skill, patience, and experience are requisite to successfully treat any case of uterine displacement. These qualities are found only in physicians of long and regular standing. By consulting such, and such only, a patient may usually be relieved.

A well-known physician of New York, impressed with the importance of having some positive conclusions on the matter of the curability of uterine displacements, both for the sake of the patient and the satisfaction of the physician, in a recent paper has analyzed the numerous cases of displacements

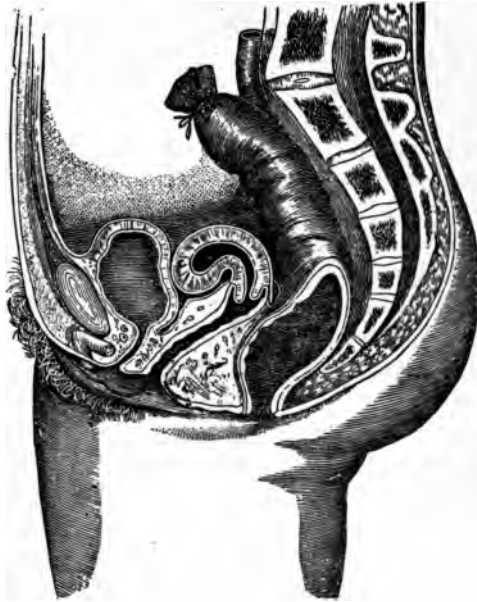


Fig. 13. — ILLUSTRATING ANTEFLEXION OF THE UTERUS.



which have come under his care (eight hundred and ninety-five), and arrives at the following deductions : —

1. Displacements of the uterus are permanently curable in the large majority of cases only when recent, or when a complete tissue change, such as occurs during pregnancy and after childbed, takes place.

2. Chronic cases of more than a year's standing are but rarely curable permanently, except occasionally under the last-named circumstances.

3. Pessaries, or supporters, unquestionably the most practicable, rational, and temporarily the most efficient, means of treating uterine displacements, but rarely accomplish a permanent cure.

4. Medicated, chiefly astringent, tampons, intelligently applied every day by the physician, or even by the patient, give the best chances for permanent cure. This is particularly true of prolapsus, but holds good for all forms of displacement.

5. Electricity locally applied deserves more extended application.

6. All methods should be persevered in for months and years before success is to be expected.

Our own experience has led us to prefer the use of medicated tampons, when it was possible, to any other means. A pessary of whatever sort must be repeatedly examined, lest, if left to itself, it may

cause an erosion of the mucous membrane, and subsequent ulceration. Unless skilfully made, and adapted to each case, the chances are that it will cause trouble. No such dangers can result from the use of tampons of cotton-wool properly medicated. The following solution is made up and kept on hand : Glycerine, eight parts ; alum, one part ; carbolic acid, one-tenth part. This solution fulfils many desirable indications. The glycerine lessens congestion by its affinity for water ; the alum constringes, and braces up the vaginal walls ; and the carbolic acid by its antiseptic properties renders it possible for the cotton to be retained for a convenient length of time.

Usually only one large tampon is employed, and it is kept in its place for three or four days without becoming offensive. In a large majority of cases this treatment, continued for from two to seven months, will result successfully.

The only disadvantage is the annoyance of such frequent repetitions of unpleasant applications with the watery discharge consequent upon them. The patient will readily decide which is preferable, — a life-long displacement, or the promise of an early cure.

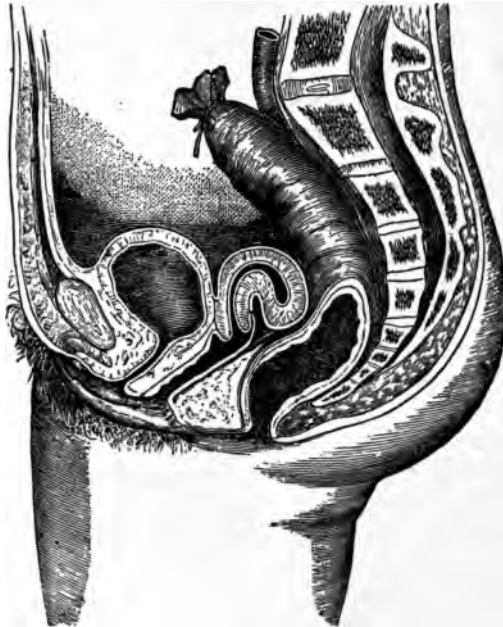


Fig. 14.—RETROFLEXION OF THE UTERUS.

CHAPTER XV.

RELATIONS OF SEXUAL DISORDERS TO THE BRAIN AND NERVOUS SYSTEM.

FEW women appear to realize what important influences are exerted by the sexual organs upon the brain and nervous system in health and disease ; much less, that one organ, or indeed one part of an organ, exercises a higher and better defined influence upon the rest of the organization than another. It is well known to most physicians that the neck of the uterus, for instance, does not affect the nervous system so much as the body of the uterus, and that it may even be wounded or amputated without exciting violent pain or inflammation. It is not so, however, with the ovaries. These are sensitive in the highest degree.

We have, in a previous chapter, studied briefly the physiological relations of the ovaries to the other sexual organs, and have seen that their function is primary in the process of reproduction ; that their activity precedes the uterine functions, and continues, as a rule, until the cessation of menstruation. It would seem, then, that the functions of the

other sexual organs are responsive to the influence of the ovaries; in other words, that the ovaries are the prime movers and controlling spirits in the sexual system.

Dr. Henry Maudsley of London has written a book, entitled "Body and Mind," — a very thoughtful production, and one, too, which we wish all of our readers would peruse. In it he states that "the organic system has most certainly an essential part in the constitution and the functions of the mind. In the great mental revolution caused by the development of the sexual system at puberty, we have the most striking example of the intimate and essential sympathy between the brain as a mental organ and other parts of the body. The change of character at this period is not by any means limited to the appearance of the sexual feelings and their sympathetic ideas, but, when traced to its ultimate reach, will be found to extend to the highest feelings of mankind, social, moral, and even religious. In its lowest sphere, as a mere animal instinct, it is clear that the sexual appetite forces the most selfish person out of the little circle of self-feeling into a wider feeling of family sympathy and a rudimentary moral feeling. The consequence is, that, when an individual is sexually mutilated at an early age, he is emasculated morally as well as physically. It has been affirmed by some philosophers

that there is no essential difference between the mind of a woman and that of a man ; and that, if a girl were subjected to the same education as a boy, she would resemble him in tastes, feelings, pursuits, and powers. To my mind it would not be one whit more absurd to affirm that the antlers of the stag, the human beard, and the cock's comb are the effects of education ; or that, by putting a girl to the same education as a boy, the female generative organs might be transformed into male organs. The physical and mental differences between the sexes intimate themselves very early in life, and declare themselves most distinctly at puberty. They are connected with the influence of the organs of generation."

We have cited these words because they emanate from a high authority, and because we wish them to serve as a prelude to what follows. To return to the ovaries, about which we were speaking : they it is which give to woman all her characteristics of body and mind, — we need not explain how or why. Were the ovaries absent, woman would tend towards the masculine type of the race. It is true, no doubt, that an individual who has been fully developed under the influence of the ovaries will continue to manifest her former attributes of body and mind after they are removed ; but it does not follow that the ovaries were negative in the

process of developing and maintaining those attributes. One who has become blind in middle life will talk familiarly and understandingly of objects impressed upon the mind through the sense of sight ; but one born blind cannot comprehend the beauties of a landscape. Furthermore, it is found, that, if the ovaries are present in a woman, she will manifest the physical and psychical peculiarities of womanhood, although all the other organs may be wanting. Women well developed in all that is peculiar to the sex have been observed in whom the uterus and vagina were defective ; but no woman has been seen of any such perfection of organization in whom the ovaries were absent.

It follows, then, that, if the ovaries are so essential to the well-being of the individual in health, these organs, when diseased, must exercise a potent influence in deranging the brain and nervous system. Assuming this to be a fact, let us dwell upon it for a few moments. The imperfect development of the ovaries retards the development of the higher nerve-centres. Their demands stimulate the brain to a higher development. As we know, a very large part of the brain and nerve-power is devoted to reproduction ; and, if that function is never established because of the absence of the ovaries, the brain and nervous system are never fully developed. In such a case the nervous system remains upon a

lower plain, and the woman usually evinces mental weakness, and often derangement of intellect. Recall to mind how speedily any derangement of menstruation will cause a disturbance, or even disease, of the nervous system. One of the causes of a certain form of painful dysmenorrhœa is, that the ovaries are at fault. In well-marked cases the pain is located in one or both ovarian regions, and is very severe and continuous. It usually precedes the flow, and does not cease until the period is ended. According to the degree of local pain, the nervous system suffers.

But it is not our purpose to describe all the diseases to which the ovaries are subject, or to estimate the effect exerted by them upon the nervous system. Suffice it to say, briefly, that any inflammatory affection of the ovaries, any displacement, produces most marked effects upon the brain and nervous system. Thus we see indigestion, spinal irritation, many forms of neuralgia, headaches, mental irritability, and insanity, all largely attributable to some disease of the ovaries.

But the question may be asked, How are we, in general, to know whether the ovaries are abnormally affected or not? We reply, Simply by the indications, which are usually very strong. The patient complains of pain, of a dull, aching character, in the ovarian region: it radiates to the back, the

abdomen, and down the limbs, and is aggravated by fatigue, mental excitement, and especially by menstruation. Some form of indigestion, too, is nearly always present, — nausea and constipation. The ovarian region is tender to the touch, — extremely so ; and, when the hand is pressed upon it, a sickening feeling and faintness creep over the patient. Not all of these symptoms are present in every case ; but the exceptions are few.

We find many of these signs in the affection termed “hysteria,” — a disease which has long been but poorly understood even by the medical profession. That hysteria may exist independently of sexual causes, we do not deny : some cases amply prove this. But that it is, as a rule, due to a derangement of the female sexual organs, especially of the ovaries, is equally certain.

Some types of hysteria are undoubtedly inherited : of these we shall have nothing to say. The hysteria which concerns us is that which we so often encounter, and of which the essential factor, as we know, is some ovarian derangement. Any thing that weakens a woman generally may revert to the ovaries, and thus, by altering the relation of the several nervous functions, bring about the condition of nervous disturbance known as hysteria. The principal characteristic of the disease seems to consist in an exaggeration of involuntary move-

ment, and a diminution of the power of the will. The patient, when the hysterical feelings come over her, does not show any disposition to resist them, but willingly yields to her emotions whatever they may be. She will laugh or cry on the slightest provocation, and is very nervous and irritable; she cares nothing for her duties, and seemingly takes pleasure in exaggerating all her slight discomforts and annoyances, and, by her suspicious, exacting, and unreasonable behavior, makes life generally uncomfortable to those about her. The more one undertakes to do for such a person by way of giving advice, comfort, or the means of cure, so much the more will he be resented: on the contrary, every word of sympathy, pity, or condolence will be heartily appreciated. Your patient, too, will tell you that it is impossible for her to do a certain thing; but, the moment your back is turned, she may go and do precisely the thing which she declared to be impossible. We have known hysterical women to undergo severe fatigue, and even privation, under the influence of a dominating idea, that a healthy person would find most arduous and difficult of accomplishment; and perhaps on the very next day the same patients would declare that the slightest effort to move the limbs was excruciatingly painful.

In the hysterical convulsions which occur, there

is no sudden loss of consciousness. The patient will inform whomever she sees near her that she "is going to have a fit," and she at once proves her assertion. The scene that follows is peculiar only to itself: there is no distortion of the features, as in epilepsy, and rarely, if ever, are the pupils of the eyes dilated. The lids quiver, and the patient sees, and often watches, the effect of her "fit" upon her friends or attendants. There may be foaming at the mouth; but the tongue is not bitten, unless purposely, to deceive the physician. It is noticeable also that the patient often utters a loud scream as she falls; but she is very careful to fall so as not to injure herself.

The treatment of hysteria is almost impossible in the home of the patient, and in the midst of the usual surroundings, as the moral and bodily constitution rapidly deteriorates under the influence of the pity, sympathy, and over-attention which hysterical patients live for, and which they are constantly laying plans to attract from their friends. In an admirable little work Dr. Weir Mitchell thus pictures the course of many cases: "No matter how it comes about, the woman grows pale and thin, eats little, or, if she eats, does not profit by it. Every thing worries her, — to sew, to write, to read, to walk, — and, by and by, the sofa or the bed is her only comfort. Every effort is paid for

dearly ; and she describes herself as aching and sore, as sleeping ill, and as needing constant stimulus and endless tonics. Then comes the mischievous *rôle* of bromides, opium, chloral, and brandy. If the case did not begin with uterine troubles, they soon appear, and are usually treated in vain, if the general means employed to build up the bodily health fail, as in many of these cases they do fail. The same remark applies to the dyspepsia and constipation which further annoy the patient, and embarrass the treatment. If such a person is emotional, she does not fail to become more so ; and even the firmest women lose self-control at last under incessant feebleness. If no rescue comes, the fate of the woman thus disordered is at last the bed. They acquire tender spines, and furnish the most lamentable examples of all the strange phenomena of hysteria."

Marriage and child-bearing may cause these troubles to disappear for a variable period, but the prospect of cure is remote and doubtful.

CHAPTER XVI.

NERVOUS PROSTRATION AMONG WOMEN.

It is very fashionable now-a-days for the sex to proclaim themselves victims of a nervous prostration. More than half of the doctor's prescriptions are directed against this complaint, — we will not call it a disease ; and, if we can believe the patients, these prescriptions rarely serve to do any good. The reason lies probably as much on the side of patients as of the doctors.

The professional name is "neurasthenia." This is a long word ; but few even in the profession know what it really means, and therefore we will leave it out altogether in our consideration of the train of symptoms which are generally designated by it. The causes of nervous prostration are seemingly manifold. Briefly, however, any thing that will induce a waste of nerve-tissue without an equal storing-up of new material will tend to cause more or less nerve-exhaustion. A too highly developed nervous system, with too great activity of the same, is undoubtedly the main factor of such a condition. Americans are singularly active. As a people we



aim to accomplish much, and we give too little time to its accomplishment. We strive to be first and foremost in every thing, and we set out to do before we have taken the time to find out how to do it. This fact holds true, not only as regards our daily labor, but even more so as regards our round of pleasure. Take women of the upper and middle classes, — and the men, too, for that matter, — and it can be truthfully said of them that nearly all are living on the principal of their strength, instead of on the interest.

The superintendent of the Michigan Insane Asylum (Dr. Van Deusen) states, as his opinion, that, among the causes of the condition, "excessive mental labor, especially when conjoined with anxiety and deficient nourishment, ranks first. Prolonged exposure to a malarial region may induce it; also great responsibility, with deprivation of sleep." Dr. Stretch Dowse says, "I believe that many severe cases of exhaustion of the brain are brought about by not paying sufficient attention to sleep and rest. Excessive fatigue, overwork, mental anxiety, shock, grief, are among some of its principal causes."

Among women local diseases, especially of the digestive and of the reproductive organs, are very frequent causes. They act as constant irritants to the nerve-centres, and through these on the whole

nervous system. Sexual excess and abuse are powerful and frequent causes of many of the worst forms of nervous prostration. Still we will admit that many physicians do not share this opinion.

Inasmuch as we are not writing a treatise for the use of the medical profession, we need not attempt to regularly classify the symptoms. Only the more important shall be noticed. Chief among these we rank sick headache. The pain may exist anywhere about the head, and is always very troublesome. At the same time, specks, bright flashes, and shadows before the eyes accompany the pressure in the head. There may also be cracklings in the ears, a weakness of voice, and some derangement of the sense of smell. The person afflicted is unable to concentrate the mind on a given subject: there is abnormal distraction, and the memory is impaired. This fact is illustrated in this wise: The person sits down to read an article in the newspaper, or a chapter in some book. She reads a paragraph, loiters, forgets the meaning of it, and has to re-read it in order to understand or keep up with the writer. From beginning to end she seems to be in a dream; and the brain is constantly the master, and not the woman herself.

As a natural sequence, the patient becomes irritable, not towards herself alone, but towards others. At times she seems to have a total depravity of

temper ; and this becomes, as it were, a part of her nature. Not unfrequently she shows a morbid fear. She well knows, she confesses, that there is no cause for it ; but her emotional nature, under the influence of her exhausted nervous condition, overcomes her reason and will. When she is not in this absurd state, she rubs her hands, keeps moving her feet, cannot rest easy in her chair ; in other words, she has the "fidgets." She is fidgety even in her sleep ; and, if she does sleep, it affords her no degree of rest.

In many cases of threatened nervous prostration, dyspepsia is the first symptom. This dyspepsia is unlike any other form of the affection. It is temporarily relieved by eating, accompanies other nervous symptoms, and is readily conquered by nerve-tonics and electricity. There is also deficient thirst to a remarkable degree, but an intense craving for stimulants and narcotics. The patient does not fancy the taste of these articles : she has no love for them ; she simply believes that she cannot live without them. This constitutes one of the worst forms of the complaint, and, in our opinion, is but one type of insanity.

Nearly every patient complains of backache of the most distressing amount. It annoys her so much that she cannot take any comfort in sitting down ; and, when in the recumbent position, she

finds but slight relief. She will declare that there are tender spots along the spine, and that "every bone aches."

One might well exclaim that such a train of bad symptoms, and such a condition as this, are certainly incurable. Doubtless this is true of some cases which present themselves, but not of the majority under proper treatment. If the person is of a nervous temperament, if she inherits this, the chances of a perfect cure are more dubious. It is thus seen that a genuine case of nervous prostration is not to be disregarded as of small consequence. Says the authority first quoted in this chapter, "We cannot but regard the early recognition of this condition as of special importance, convinced that properly directed treatment will in the majority of cases stay its progress." And Dr. Dowse writes on the same point, "I have no hesitation in asserting it to be my firm belief, that many of the incurable cases of insanity, locomotor ataxy, progressive muscular wasting, and many other diseases of the brain and nervous system, commence as a neurasthenia of nervous centres, and, when in this state, are quite amenable to treatment." Dr. Beard also thinks that "neurasthenia neglected, exasperated by bad hygiene or by bad treatment, may be the precursor of certain forms of insanity."

There are but two ways of combating this con-

dition; namely, by *rest* and by *nutrition*. Rest is very important; and, without it, all the medicines in the shops will avail nothing. But we must explain what we mean by "rest." We include in this term absolute seclusion from family and friends, and also what the reader may perhaps call "sheer laziness."

Not very long ago Dr. Weir Mitchell of Philadelphia, the eminent specialist in diseases of the nervous system, announced the splendid results which he had obtained by a new method of treatment for the hitherto obstinately rebellious condition of nervous prostration. These results were made known in a little book entitled "Fat and Blood: How to make them." A more recent work confirms all he had previously declared to be true. Among the many cases thus treated successfully by other physicians we are induced to allude to two types.

In the first case the patient was thin, sallow, wan, and extremely nervous; her menses were irregular and scanty; she suffered from constant backache, headache, and was prostrated generally. She was at once placed on the "rest" treatment. Sleep became natural and refreshing, the circulation of hands and feet became natural, the pains disappeared, the complexion cleared up, the digestion became perfect, the muscles developed, and the weight of body was increased.

In the second case the patient was stout, phlegmatic, and well nourished. The same treatment, and the same gratifying result.

There is a lesson in all this alike for the doctor and for the patient. It should teach the former that he need not always attribute a woman's sufferings to a uterine cause, even if she have some trouble with her sexual organs. It should teach the woman herself that a little foreknowledge, however small, does no harm, even though she has sought the opinion of her physician. Uterine disease may cause a state of nervous prostration, but only a few of all the cases are occasioned by it. Experience shows the association of uterine diseases, chiefly displacements and nerve-pain, to be most frequent in delicate, sensitive natures, who have known grief, or abused themselves in fashionable dissipation. A wifely anxiety for the conduct of a husband, domestic worries, and literary ambition also frequently conduce to the bringing-on of the condition. We repeat, the primary condition and all its accessories often exist independently of any womb complications : on the other hand, thousands of women with dislocated wombs go through life with a certain measure of comfort, without any nervous irritability.

The so-called "rest" treatment consists in absolute rest, in bed, of body and mind ; full feeding

with nutritious, easily digested food ; massage and shampooing, Swedish movements and electricity. In addition to these, various tonics and brain-foods may be used if there be a clear necessity. The patient is put to bed in a dark room of ample dimensions, and the services of a careful and experienced nurse are employed. Our patient is not allowed to assist herself or move in any way. She cannot see her husband or her friends, or even receive letters from them. She must neither read, sew, nor converse on any subject requiring mental effort. Her diet is at first milk, — this only, and skimmed at that. A little later she is allowed to have eggs, poultry, etc. ; then massage and electricity are employed at proper intervals, the first to soothe the nervous system, the second to favor its nutrition. The entire treatment is continued in most cases about six weeks.

Of course this treatment is expensive, for the doctor and nurse must be paid for their time and services ; but the result will as a rule prove more than satisfactory. It will rarely occur by any other method.

CHAPTER XVII.

BACKACHE AND ITS LESSONS.

IF there is any other condition of which women complain more frequently than they do of an aching back, it has so far escaped our knowledge. It matters little whatever may be the social status of the individual,—whether she be surrounded by luxury and all the comforts of life, or whether she have no real comforts at all, and is forced to labor hard from morning until night,—the condition is alike present, and the degree of suffering is about the same. How often is a physician called upon to prescribe for this one symptom alone, and how futile the result in the great majority of cases!

A great many theoretical views have been enunciated on this question, which, however, from a practical point of view have little or no importance towards solving the problem. It seems to be, nevertheless, well established, that a person may be afflicted with a nervous disease without having any pronounced lesion of the spine, and which, too, cannot be said to be in any way related to the so-called hysterical affections. Hun-

dreds of women, who thought themselves entirely free from every form of disease, have yet confessed themselves more or less annoyed by pain in the back, either of an intermittent or of a constant character. To the observer these women appeared to be blessed with perfect health, their habits of life regular, their daily occupations not over-exacting; yet, almost invariably, they manifested a nervous temperament, were easily aroused and emotional, and had the backache, and bore up under it with patience, just as if they regarded it as their lot in life, or as a part of their nature.

In very many cases, however, we do not find such a remarkable absence of allied symptoms; and, while the patients will not willingly acknowledge themselves ill, they yet admit that they "are not very strong," "are not feeling very well," or "are tired out easily." They are ashamed to confess it; for they fail to see what should make them so. They disdain to act, when they cannot discover that they are, as invalids.

If we question them freely, we shall probably be apt to convince them on this point. Watch such women when they do not imagine that you have any thought about them. They will sigh occasionally, look sad for a moment or two, and then straighten up in their chair, throw the head backwards, and relax the muscles as quickly. The

experienced observer knows at once that they are not feeling at their best, and can almost declare, on his oath, that they have the backache.

And this is simply the beginning. It will develop progressively until other symptoms appear to render matters even worse. The *ache* will have a tendency to increase in violence, so that by and by the poor victims can only walk a few steps without marked tremor and vertigo. Possibly they cannot even use their hands in the simplest occupations to perform any manual labor, to write, play the piano, etc., because all muscular effort produces pain in the back and limbs. The patient only demands one thing, — simply to be left alone, and to lie on her back. One would think that some form of paralysis was threatening to intervene, but it never does.

In many cases, aside from the foregoing symptoms, we note others of a purely mental character. There is, indeed, a condition of intellectual *malaise*, and a feeling of constriction in the head. The patient cannot speak or read for any length of time, as she soon becomes tired. The face reddens or pales. Insomnia usually occurs.

Now, it is plainly evident that backache can be only a symptom of, and not itself, disease, and that whoever is afflicted by it cannot be said to be well, or in the enjoyment of health. We assert this, the statements of patients to the contrary notwithstanding.

ing. More than one woman has flown into a passion when told that such was the case. She has denied the existence of any disease, but has freely admitted that she would prefer to have one, provided it would rid her of this one source of suffering and complaint.

The condition which we have previously pictured, and of which backache is a most striking symptom, is found in women, especially from the ages of ten to thirty years. The history always shows that for a longer or shorter period of time some influence, either of a stimulating or of a depressing character, has been working upon the nervous system. The girl has been reading novels, and her emotions have been wrought up to a high state. She has lost a parent or a dear friend, and the future looks dark and vacant to her unbalanced mind. Perhaps she has loved well but not wisely ; and her adored has either not reciprocated her affection, or, pretending to do so, has abandoned her suddenly, and seemingly without cause. Yes, in more ways than one, fickle-minded man has proved himself a veritable curse to woman, and the prime cause of half of her suffering, not alone mentally, but physically. In married life over-exertion and excessive stimulation of sexual desires also constitute very frequent causes.

In a great many other cases, probably, simply a mal-nutrition of the nerve-centres is the cause of

the condition. For a long time the appetite has been capricious, digestion has become deranged, the blood has lost tone, and thus the whole system has been made to suffer.

There is a growing tendency nowadays to attribute this condition of malaise to some disorder of the uterine system. The moment a woman complains of having backache as a habit, too many doctors hasten to the conclusion that she surely must have some disease of the reproductive organs. Now, backache is a symptom of several forms of sexual disease, notably of uterine displacements and of ovarian inflammation ; but its existence is by no means proof positive that these latter are present. Dr. Goodell ably expresses our opinion on this point. "During menstrual life," he says, "the sexual sphere preponderates over the others, so the stress of the anæmia or of the hyperæmia in these secondary circulatory disturbances very generally falls on the reproductive apparatus. Then, again, mal-nutrition of nerve-centres produces a poverty in the quality of the blood, in which obtains a peculiar susceptibility to emotional excitement. Hysteria is not, then, necessarily a diseased womb, nor yet is it an abstract entity, but the definite expression of some morbid action going on in the nerve-centres."

The same writer draws the following very com-

mon picture from life : A girl who entered puberty in blooming health, and without an ache, is overtasked and overtaxed at school, and her health begins to fail. She loses her appetite, and grows pale and weak. She has cold feet, blue finger-nails, and complains of a pain in the breast. Headache and backache and spineache, and an oppressive sense of exhaustion, distress her. Her menses, hitherto without suffering, now begin to annoy her more and more, until they become extremely painful. Her linen is stained by an exhausting leucorrhœa, and bladder troubles soon set in. She is wearied beyond measure by the slightest mental or physical exertion. A grasshopper is a burden to her, and she finally becomes hysterical. Now, very unfortunately, the idea attached to this group of symptoms is, that the reproductive organs are at fault, and that the unit of resistance lies in the womb. Unfortunately, again, the conclusion is generally all wrong.

There are still other causes which bring about more or less of the condition just spoken of. We allude to the habit of standing long on the feet, — a habit too often obligatory upon girls who labor as saleswomen in our large cities. We could mention several places of this sort, — stores owned by proprietors of acknowledged Christian integrity, — where no girl can sit down for a moment to rest

during working-hours without violating a rule of the establishment. We are well aware of what reasons are given for such severity, but we fail to appreciate their validity. We have hitherto asserted that one of the most prolific causes of leucorrhœa in unmarried women was this long standing on the feet for hours without rest or relaxation. As certain are we that leucorrhœa is a most frequent cause of backache, — we mean simple backaches untended by but few or none of the other symptoms which foreshadow a nervous disease, — and that, until the leucorrhœa is cured, the backache will continue.

Still another cause is the senseless wearing of high-heeled boots, which necessitates the continuous action of the muscles of the lower part of the spine, in order to maintain the proper balance and erect position. Here, again, fashion is the ally of the undertaker. It is really surprising what very serious symptoms may arise from such an apparently trivial cause. The following is a typical case : —

Miss M., aged eighteen, an assistant in a large dry-goods house ; a delicate-looking blonde, of pale, lymphatic temperament, subject at times to hysteria. She had been quite regular since she was fifteen ; but occasionally her menses were profuse. She complained of almost nothing except severe

backache, "a feeling as if her back had been bruised," which frequently prevented her from sleeping at night. She had had leucorrhœa on several occasions, even a sufficient flow to make her think she was menstruating ; but at present she had none, and felt better and stronger than for some time, with the sole exception of backache.

Her appetite, though generally capricious, was now good. For her rest, a change of air, a mild preparation of iron, and a belladonna plaster to the back were prescribed. She was also advised to lie at least an hour, morning and afternoon, on the sofa, with a cushion well pressed into the back, and to take a short walk twice a day.

The lady obtained a fortnight's vacation, and went off to another city to visit friends. When she returned, the headache was no better,—in fact, worse. She and her mother both declared that there must "be something wrong about her back." Said the mother also, "I have noticed that Ella's trouble is always the worst on Sunday nights and all day on Mondays ; but since she has been away from home, she says, every day was the same."

A very careful examination, however, disclosed nothing abnormal about the back. By merest chance it was discovered that the young lady was wearing very high-heeled boots. Was this the

cause of her suffering? Well, she must have another fortnight's vacation, — carry out all the directions as before, and in addition must wear woollen stockings and a pair of soft-soled house slippers; at no time put on the boots that she had been wearing. In due time she came back to say that she was now "feeling quite well," and intended to go at once back to the store. She admitted that the high-heeled boots were the cause of her backache; and such they truly were.

The best treatment of all such cases consists in three objects, — first, to seek and to remove the cause; second, to repair the damage already done; and, lastly, to fortify the patient against a recurrence of the affection. All these ends may be reached by the "rest" treatment of Dr. Mitchell, as we have described it in a previous chapter. Pills, powders, and plasters alone will do no good whatsoever; on the other hand, the results of the rest, of the massage, of the electricity, of the seclusion, and of the feeding, which constitute the only treatment that avails any thing, will so far surpass the expectations of both the physician and the patient, that either will feel inclined to say with Horatio, —

"Before my God, I might not them believe
Without the sensible and true avouch
Of mine own eyes."

CHAPTER XVIII.

VESICAL TROUBLES AND FISTULÆ.

THE anatomical peculiarities of the female bladder, its position immediately behind the hard symphysis pubis, its relation to and close connection with the womb and vagina, make this organ very liable to be influenced by disturbing elements. Such is the prevalence of these vesical troubles that it may almost be said, without exaggeration, that no woman is indeed free from some form or other of them coming on at one period or another in the course of life.

There can scarcely be any acute vaginal inflammation in which the urethra is not more or less involved. When this inflammation has been caused by gonorrhœal poison, the pain is most severe for a while, but can usually be relieved by the insertion of a morphine suppository.

Women often present themselves to their physician complaining of frequent or painful urination. In some cases they say that there is a constant dribbling of the urine; in other cases the history is of long-retained urine, with an involuntary dis-

charge at intervals. In the first-named variety the condition will almost always be found to depend upon some central disease of the nervous system, or upon some previous injury to the urethra, or to be the mere expression of an over-distended bladder.

We find occasional incontinence of urine most frequently in children before puberty; and here all that can be said of it is, that it is a bad habit. They prefer to sleep rather than get up to urinate. However, they should never be punished for it, otherwise than by some moral influence; and it is always best corrected by careful attention to their early rising. In some cases nothing whatever appears to work successfully; and here the incontinence may go on after puberty, and even continue through the whole of life.

An irritable bladder may also be due, in women, to other and extra causes. For example, a tumor in the womb, or even a displaced womb, may press unduly upon it, and thus relax its power to retain the urine. Any woman who has borne children knows, also, to how great an extent pregnancy annoys the bladder.

But the most obstinate of all affections of the female bladder seems to be that known as chronic cystitis, which may and often does start from certain injuries produced by childbirth, but more fre

quently is associated with, and even originated by, some prolapse of the vagina, due to the habit, so prevalent among women, of retaining the urine in the bladder until it is over-extended. The differences in the anatomical relations of the bladder in men and women give rise to very different habits in this respect. Our social habits make it much easier for men than for women to empty their bladders with sufficient frequency, so that women become accustomed to employ their additional accommodation at the expense of their organs, and dilatation gradually takes place of the walls of the bladder. As this dilatation goes on, it becomes more and more difficult to empty the bladder completely, so that ultimately a residuum of urine is retained at the point of dilatation, which decomposes, and gives rise to chronic catarrh of the bladder. Cystitis is clearly a condition calling for medical assistance, and that, too, at the earliest possible moment.

Occasionally the female bladder is subject to an ulceration of a non-malignant character. This ulceration consists in the destruction of the mucous membrane in patches which vary greatly in size and shape, but which are usually situated at the base of the bladder. It is always associated with chronic cystitis, and is probably only one of its results. The symptoms, too, are similar, the

urine being ropy, purulent, albuminous, and ammoniacal ; the bladders being very tender on pressure, and incapable of enduring distention. -

Stone in the bladder is much less common in women than in men ; and the symptoms it occasions in women are rarely so severe as those suffered by the other sex. The symptom which most conclusively points to the presence of a stone in the bladder is the pain and straining after the bladder has been emptied. When such a symptom presents itself, surgical interference should be sought.

We have now to speak of vaginal *fistula*, which are among the most common affections suffered by women. A fistula, briefly described, is simply a channel of communication between two of the pelvic organs. The books designate them according to the organs which they involve. The accompanying illustration will aid us better than any wordy description which might be given. In this illustration A represents the course of a vesico-uterine fistula ; B, that of a vesico-utero-vaginal fistula ; C, a vesico-vaginal fistula ; D, a urethro-vaginal fistula ; E, a recto-vaginal fistula ; and F, a perineo-vaginal fistula.

These fistulae are almost always caused either by an acute laceration of the wall, or, what is much more frequent, by the continuous and long-sustained pressure of some neglected instrument,

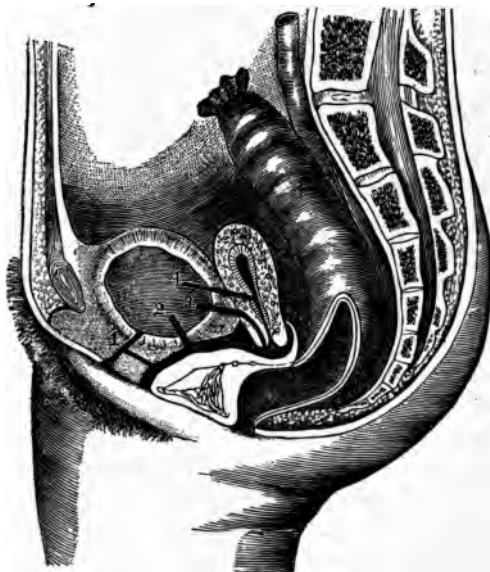


Fig. 15. — VARIETIES OF URINARY FISTULÆ.

1, Urethro-Vaginal Fistula; 2, Vesico-Vaginal Fistula; 3, Vesico-Utero-Vaginal Fistula; 4, Vesico-Uterine Fistula.

or of the foetal head in labor. We have known several cases to occur in women who have borne a first child without having proper medical attendance ; and the misfortune was here unquestionably due to the patients' concealing as long as possible the fact that they were in labor, they being unmarried.

Urethro-vaginal fistulæ are quite rare, and are probably always the result of direct injury. Recto-vaginal fistulæ are likewise not so common, unless they are of cancerous origin.

Whatever may be the variety, fistulæ can be cured only by surgical interference.

CHAPTER XIX.

MULTUM IN PARVO.

THE following chapter is intended to serve more as a glossary than as an abridged treatise on the diseases of women. While the course of treatment and formulæ specified are thought to be in accordance with the most recent study and experience, still it must not be looked upon as infallible, or even the best adapted to every case of illness that may happen. The old adage, "One man's meat is another man's poison," is as true in this as in every other branch of medical science. In order to facilitate reference, and also assist the mind in its comprehension of the subject, we have classified and grouped the various diseases with special reference to the organ or organs which they involve. We begin first with the

DISEASES OF THE MONS VENERIS.

Pityriasis Versicolor. — A perfectly harmless eruption, of a reddish-brown color, slightly raised above the level of the healthy skin. Never scaly. Treatment: Frequent baths, with a liberal use of

soap, and the application, after the skin has been well rubbed with a rough towel, of a lotion. Prescription 15.

Alopecia. — A form of baldness, which attacks the genitals, and is probably of parasitic origin. Often dates from first labors. Treatment: Nothing curative has been discovered.

Eczema. — The most common form of skin-disease met with on the genitals of women. It is rarely seen in its earlier stage, when vesicles are present; but when the patient, usually after long suffering, seeks advice, the whole organs being found red, hard, swollen, extremely painful, and exuding a large quantity of purulent fluid. Warmth in bed increases the distress, and only free exposure to the air appears to afford any relief. Treatment: See Prescription 16.

DISEASES OF THE VULVA.

Eczema. — An allusion has already been made to this disease when affecting the Mons Veneris. As a rule, it has previously attacked the labia, and extended upwards. It usually begins on the inner surface of the labia, and gives rise to the sensation of itching. Subsequently the labia become hard, swollen, fissured, and red; and the disease may extend back round the anus, into the folds of the groins, and up on the abdomen. Treatment: See Prescription 16.

Acne. — A very common and troublesome disease of the external genitals. The spots are usually of small size, save on the very margin of the labia, where they generally appear as large boils of a most painful character. Treatment: Attending disorders must first be removed by proper means, and then recourse should be had to remedies capable of improving the general health.

Vulvitis. — This implies an inflammation of the external genitals. It may be purely catarrhal in its origin, in which case the pain is slight, the heat and itching both great, and the discharge of a yellowish character. After marriage many young women evince a form of this disease, which, however, is readily cured by a weak lotion of alum or sulphate of zinc. When vulvitis is caused by gonorrhœal infection, the pain and scalding, especially during urination, are very great, and the labia are remarkably swollen. While a man may contract a gonorrhœa of the most severe type from a woman who is not, and never has been, the subject of this disease, no woman ever contracts gonorrhœa, save by connection with a man suffering from it. Hence married couples should be cautious lest they unjustly accuse one another. Treatment: See Prescription 17.

Rupture with Hemorrhage. — At a woman's first intercourse the *hymen* and *labiæ minora* are both

usually ruptured ; and, if the male organ be of disproportionate size, the injury is sometimes very serious. Many a physician has listened to the histories given by suffering women of the miseries they underwent during the first six or eight months of their married lives, miseries which are greatly due to the absurd social custom of the honeymoon. In these cases of rupture the hemorrhage is sometimes alarming ; and, as intercourse is repeated at very frequent intervals during the first few months of married life, the injury wrought is not allowed to heal, but soon results in painful cracks, which ultimately render intercourse so painful as to oblige the wife to refuse altogether to submit to it. Now, this suffering may be wholly avoided, or at least greatly diminished, by the inunction of the vulva with a simple ointment previous to intercourse. Oh ! how often have we thought of what a blessing it would be to young women about to be married, if their mothers would give them a little advice based on their own experience ! but there is a false modesty on these subjects, ingrained like original sin in our daily life, which has to be dearly paid for in much suffering amongst women.

DISEASES OF THE VAGINA.

Fistulæ. — These have already been explained in an earlier chapter.¹

¹ *Vide* chapter on " Vesical Troubles and Fistulæ."

Vaginismus. — When the orifice of the vulva is so highly sensitive as to render a woman unfit for submission to sexual intercourse, she is said to suffer from this complaint. Personally we do not believe that such a condition ever existed, or, if it did exist, was not referrible to the condition following first intercourse, as explained just above.

Vaginitis. — Our remarks relative to vulvitis apply also to the various inflammations to which the vagina is subject. Of course the treatment depends wholly upon the cause. Consult the chapter on "Leucorrhœa."

DISEASES OF THE UTERUS.

Inflammation of the Os Externum. — This may be either catarrhal or gonorrhœal in its origin. In either case it usually extends up from the vagina. If neglected, it will continue for a long time; and the profuse purulent discharge arising from it is a most fruitful source of gonorrhœa in the male. It is also a certain cause of sterility in the sufferers. Treatment: Consult a physician at the earliest opportunity.

Ulceration of the Os. — This condition is of quite frequent occurrence, and is best treated by a surgeon.

Inflammation of the Cervix. — This frequently exists either as the result of catarrh, gonorrhœa, or

some other poison in the system. "Uterine leucorrhœa," as previously described, is one form in which the inflammation manifests itself. During the last few weeks of pregnancy, and for some time after labor, married life has perforce been suspended. The discharge from the inflamed cervix, which may still continue, may at the first subsequent intercourse have all the effect of gonorrhœa upon the husband. A remembrance of this fact may relieve both husbands and wives of painful misapprehension. A husband may suspect his wife's chastity under the circumstances, though that is infinitely more rare than the converse ; for, as a rule, when a woman makes the unpleasant discovery that "there is something wrong" with her husband, she immediately credits some other woman with the mischief. Then, in addition, she blames her husband for her own condition. A little detailed explanation will always be enough for reasonable women, and the others are best left alone.

Cancer of the Cervix.— We have pretty carefully discussed this subject in a preceding chapter, and need not repeat any thing here. We mention it at all simply to remind the reader that it is of every-day occurrence.

Inflammation of the Fundus.— A number of long and, to the average reader, unintelligible terms have been invented to designate the various inflam-

matory disorders of the body of the uterus. They are all conditions requiring the best knowledge and skill of the physician.

Displacements. — These have been described in a previous chapter.

Menstrual Derangements. — See the chapter on “Disorders of Menstruation.”

DISEASES OF THE OVARIES.

Ovaritis. — An inflammation of one or both ovaries, which we have commented on in our chapter on the “Relations of the Sexual Organs to the Brain and Nervous System.” As a rule, young women of nervous temperament, while engaged in school-study, are the victims. Particularly noticeable has this been in the case of girls studying music in boarding-schools. To keep such a person, during her first efforts of sexual development, seated upright on a music-stool with her back unsupported, drumming vigorously at a piano for several hours, is certainly detrimental, and answers for a great deal of menstrual mischief. On the other hand, there is something to be said on the side of morals. It may be only a coincidence; but it has been observed over and over again that this affection exists chiefly in girls who have had no brothers, or brothers only younger than themselves; and we are firmly convinced that great harm is done to

many girls by their rigid social seclusion in youth from the companionship of boys. Under proper supervision no wrong could happen from more unrestricted association of boys and girls at their critical periods.

With the foregoing summary of the more important diseases of the common life of women, we draw our volume to a conclusion. At the start our purpose and aim were distinctly stated, and we leave it to our fair readers to decide whether we have succeeded in fulfilling them.

Our subject is far from being a pleasant one. It is not one which you would wish to discuss around the fireside, nor is it one either which many women care to have frequently brought to their attention. Nevertheless, that it must be discussed is beyond any question or doubt. False modesty seems well enough ; but it covers up a vast amount of ignorance, and too often adjudges suffering to be a sin. Were we not impressed with the belief that more than half of woman's ills are due wholly to herself, partly in ignorance and partly in sin, we should have refrained wholly from writing as plainly as we hope we have done in these pages. When women shall begin to see and to know themselves as the Creator intended that they should, then shall we hear of fewer invalids, and the papers will record fewer stories of public crime.

This beginning should be made in youth at the time when the girl approaches the period of pubescence. It is a duty for mothers to perform, and not one for physicians or moralists. One of the greatest practical results of the discovery by Mr. Darwin of the descent of man from the animals which have gone before him is, that by it the sexual instincts, or, as they are generally and most unfortunately termed, the sexual passions, are shown to be the most necessary as well as the most prevalent of all the instincts which have been evolved by the necessities of animal existence. The female organism has always been merely the vehicle for the maturation of the ovum, and for the reception of the fertilizing influence of the male ; being, in fact, what we may call the passive factor in the reproductive act. For her part of the process, then, only enough of sexual passion or instinct is required to indicate to the male the stage at which his share may be effectually performed.

For the male, on the contrary, a constant tendency to aggression is necessary that he may be in readiness at the time required. Further, the struggle for the survival of the fittest has constantly been carried out in its chiefest severity amongst the males of all animals, and only partially amongst the females, so that it has come to be that the physically fittest has necessarily been also the sexually

most powerful. It ought to be, therefore, no matter of surprise that in the human race the sexual instinct is very powerful in man, and comparatively weak in woman.

These facts open up a very wide field for thought, and plainly show that we have not yet exhausted every feature of the subject which we have been discussing. If what we *have* said, however, shall exert the influence which we have hoped for, more than rewarded will be all the time and study devoted to this work.

CHAPTER XX.

ON THE USE OF VAGINAL INJECTIONS.

THE application of water, pure or medicated, to the walls of the vagina and the cervical portion of the uterus, in health or disease, by means of syringes of various patterns, has been in use since time immemorial. Still, it is only within recent years that the true value of many of these injections has been recognized to consist in their thermic qualities. It is to call attention to the proper methods of employing such injections, rather than to describe the large number of contrivances for the introduction of fluids into the vagina, that the present chapter is written.

There are many kinds of syringes in the market ; and each manufacturer, of course, claims that his own particular pattern is the best. Many people imagine, also, that one syringe is just as suitable as another, and that there is no very great difference between them. This is an erroneous notion, that has sometimes led to very serious consequences. Let us glance at some of the most common kinds of syringes.

The old, time-honored, metal piston-syringe is happily fallen into disuse ; and it is to be hoped that it will never be recalled. Of the ordinary bulb-and-tube syringes which are so generally employed, perhaps there is none superior in action to the well-known "Davidson," though even this presents a serious objection in many instances ; namely, the presence of a central aperture in the vaginal nozzle. Another objection to this, and to all syringes based upon the same principle, is, that the force required to operate it for any length of time is likely to exhaust the patient. Better than the Davidson is the so-called fountain syringe, which requires no effort on the part of the patient to work it, and which affords an uninterrupted current from first to last while it is in use ; but the vaginal tubes of all the fountain syringes have the central aperture.

For all purposes, the instrument suggested by Dr. Wilhoft of New York appears to have the least objections of any : indeed, it is almost perfect in its way in respect of utility, convenience, and economy. It is called the "lady's syringe," and is purely a vaginal syringe. Its form and shape are shown in the accompanying cut. It is made of the best quality of soft rubber, in one piece, and is not complicated by any tubing, extra nozzles, valves, and screw-threads, which may

easily be lost or get out of order. It consists of two parts, — the vaginal plug, which is the end inserted into the vagina ; and the bulb, which holds the injection or fluid. When filling the syringe, the bulb and the nozzle are to be compressed by



both hands, so as to expel as much air as possible, and the mouth of the nozzle dipped into the fluid, which will be at once drawn into the instrument. The vaginal plug is then to be firmly pressed into the vagina in an upward and backward direction, while with the right hand the bulb is gently compressed. The fluid now passes into the vagina, and, expanding it, comes in contact with the entire interior surface. On relieving the bulb from pressure, the fluid is imme-

diately withdrawn into the syringe. It will thus be seen, that, by repeatedly injecting and withdrawing the fluid during the same operation, the most perfect cleansing of the parts is effected. When the injection is made simply for the purpose of cleansing the parts, tepid water, to which a little borax or saleratus has been added, proves effectual. When the syringe is employed for the purpose of

medicating diseased parts, some one of the injection-fluids named in the Appendix should be used.¹

For ordinary cleansing purposes, the erect, sitting, or crouching position is advisable. The quantity of fluid to be injected should be not less than a pint nor more than a quart. If disinfection of the parts is desired, a greater quantity of water should be employed, and the operation should be continued until all odor shall have been removed.

We have previously stated that much of the therapeutic value of vaginal injections depends upon their thermic qualities. Dr. Emmet of New York, a few years since, first brought to the notice of the profession the great importance of the systematic injection of hot water in the treatment of the various diseases of the uterus; and so practical were his arguments, that most physicians have now adopted his method. When taking a hot-water injection, the patient must invariably lie upon her back, with the hips raised and the shoulders depressed; and the water should be as hot as can be borne, beginning with 100° to 105° Fahrenheit, and increasing a degree or more daily until 115° to 120° Fahrenheit are reached. A hot vaginal bath should be taken at least twice a day, and

¹ The lady's syringe is made by the Goodyear Rubber Company of New York, but can be obtained from all dealers in surgical instruments, and most druggists.

a quantity of water used each time, which will require at least twenty minutes to escape from the syringe. Such injections, in order to prove of benefit, should be regularly continued, with the exception of the menstrual periods, for months and even several years.

The disadvantage of the recumbent position during vaginal irrigation, is the difficulty of combining comfort and a proper receptacle for the injection-fluid as it leaves the vagina. Evidently, the ordinary syringes cannot thus be used without great annoyance to the patient and the risk of soiling the clothing. To overcome this difficulty various plans have been suggested and contrivances devised. The accompanying illustration shows the most perfect appliance which we have ever seen for this purpose, and which certainly meets all the indications. It is called a cup-syringe. It consists of three parts,—the syringe proper, a hard rubber cup which serves as a receptacle for the fluid after it leaves the vagina, and a drainage-tube. When used, the instrument is to be applied in the manner shown in the cut, with the patient lying upon her back. No assistant is needed, and there need be no fear of soiling the bed. If desired, the syringe may be easily detached from the cup, when the latter will then form a perfect urinal. For medical purposes this syringe is the best in the world. When it is

required to employ hot water in the treatment of the various uterine diseases, such as weaknesses, displacements, ovarian tenderness and inflammation, it should always be borne in mind that the full benefits can be obtained by administering the injections



only while the patient is lying upon her back ; and that for this purpose the cup-syringe is not only desirable but even indispensable.¹

¹ The cup-syringe is not sold by druggists, but at present is furnished only by direction of physicians. Any lady desiring to purchase one, can have her order filled on application to the author of this work. The price is *four dollars* (including expressage), which must of course be remitted with the order.

Whatever syringe may be used, and for whatever purpose, the vaginal tubes should be of rubber. Metal and glass tubes are abominable. As already remarked, the tube should have no central aperture ; or, if it already have one, it should be plugged up with wood before it is used. The danger from employing such a tube lies in this : a stream of fluid may be injected direct into the uterine cavity, and perhaps through the Fallopian tubes, causing the same to distend, and possibly originating colic, severe abdominal pain, and, indeed, peritonitis. Physicians generally understand this matter ; but, for some reason or other, the instrument-makers still cling to their own ideas, and are slow to give way.

The following general suggestions relative to vaginal injections may prove of service :—

“It is surprising,” writes Dr. Mundé, “how little even educated women think of attending to the regular cleansing and bathing of their sexual organs. They may take full baths occasionally ; but in the interval it does not occur to them that their vulvar and anal regions need quite as much (if not more) washing than their hands and faces. Every woman, indeed, should wash her genitals with a soft cloth or sponge after each urination, and certainly every morning and evening. A vaginal injection is, of course, not necessary so often.

Women who do not suffer from habitual leucorrhœa need not cleanse their vaginal canals but once a week or so. If they have a habitual discharge, one or two injections a day should be used, generally of some mild astringent, alkaline solution, or of soapsuds. A very common time for a vaginal injection with those of our ladies (unfortunately, by far too large a number) who desire to prevent increase of family, is immediately after sexual intercourse. It should be understood by the physician, and impressed upon the lady, that such injections, aside from the morality of the proceeding, are objectionable and injurious, no matter whether the water used be cold or warm or medicated."

Vaginal injections should be suspended during the menstrual flow, and be recommenced after its cessation.

The indications for an astringent injection are, a vaginal discharge of mucous or mucopurulent character, and hemorrhage from the uterus or vagina.

There are two *counter-indications* to vaginal injections, — first, when the cervix is torn or lacerated, there is danger of injecting the fluid into the uterus; and, second, the use of a hot-water injection during pregnancy may induce a miscarriage.

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APPENDIX.

PRESCRIPTION I.

Solution of citrate of ammonia . . 3 fluid ounces
Citrate of iron and quinine . . . 10 grains
Simple sirup 1 fluid ounce
Water 4 fluid ounces

Dose, two tablespoonfuls three times a day. For the
anæmia of pregnancy.

PRESCRIPTION II.

Iodide of iron 16 grains
Tincture of calumba 1 fluid ounce
Water 7 fluid ounces

Dose, two tablespoonfuls twice a day. For the anæmia
of pregnancy.

PRESCRIPTION III.

Fowler's solution 1 drachm
Tincture of chloride of iron . . . 4 drachms
Diluted muriatic acid 4 drachms
Sirup of lemons 3 fluid ounces
Water, enough to make 8 fluid ounces

Dose, dessertspoonful three times a day after meals. For
anæmia of pregnancy.

PRESCRIPTION IV.

Bitter wine of iron 7 fluid ounces
 Tincture of nux vomica 4 fluid drachms
 Fowler's solution 2 fluid drachms

Dose, dessertspoonful in a glassful of water, after each meal. For general anæmia.

PRESCRIPTION V.

Oxalate of copper 10 grains
 Compound tragacanth powder . . 10 grains
 Tincture of orange 30 drops
 Water 1 fluid ounce

This amount for one dose, as required. For the nausea of pregnancy.

PRESCRIPTION VI.

Powdered calumba 4 drachms
 " senna 1 drachm
 " ginger 4 drachms
 Boiling water 1 pint

Dose, a wineglassful three times a day. For the nausea of pregnancy.

PRESCRIPTION VII.

Oxalate of copper 10 grains
 Subnitrate of bismuth 30 grains
 Make into ten powders.

Dose, one powder in water five or six times a day. For nausea of pregnancy.

PRESCRIPTION VIII.

Rose-water	2 fluid ounces
Glycerine	2 fluid ounces
Tannic acid	2 drachms

Make into a lotion.

Apply carefully, after washing the nipple. For sore nipples.

PRESCRIPTION IX.

Extract of krameria	15 grains
Oil of sweet almonds	30 drops
Cocoa butter	2 drachms

Apply after the child has ceased to nurse. For sore nipples

PRESCRIPTION X.

Compound extract of colocinth	12 grains
Powdered rhubarb	6 grains
Extract of belladonna	1 grain
Extract of hyoscyamus	3 grains

Divide into sixty pills.

Dose, one pill at bedtime. For habitual constipation among women.

PRESCRIPTION XI.

Powdered valerian	3 drachms
Laudanum	10 drops
Warm water	8 fluid ounces

For a rectal injection, in a case of painful dysmenorrhœa.

PRESCRIPTION XII.

Compound spirits of ether . . . 30 drops

Solution of acetate of ammonia . 15 drops

For one dose several times daily, in painful dysmenorrhœa.

PRESCRIPTION XIII.

Calomel 10 grains

Powdered jalap 20 grains

For one dose, as a drastic purgative at the period of the turn of life.

PRESCRIPTION XIV.

Muriate of ammonia 1 drachm

Tincture of cinchona 4 drachms

Wine of rhubarb 2 drachms

Dose, one tablespoonful three times daily. An alterative tonic in debility.

PRESCRIPTION XV.

Carbolic acid 10 drops

Glycerine 4 fluid drachms

Water 4 fluid drachms

Apply locally. For pityriasis versicolor.

PRESCRIPTION XVI.

Oxide of zinc 1 drachm

Glycerine 1 fluid ounce

Lime-water 1 fluid ounce

Rub up the zinc with the glycerine, and add the lime-water. Apply locally several times a day, and subsequently anoint the parts with petroleum ointment. For eczema of the genital organs.

PRESCRIPTION XVII.

Chlorate of potassa	4 drachms
Bromide of potassa	4 drachms
Alum	1 ounce
Warm water	2 pints

To be used as a vaginal injection. For vulvitis.

PRESCRIPTION XVIII.

Tincture of iodine	45 drops
Carbolic acid	6 drops
Glycerine	1 fluid ounce
Water	6 fluid ounces

For a vaginal injection in chronic vaginal discharges.

PRESCRIPTION XIX.

Thin boiled starch	$\frac{1}{2}$ pint
Powdered chlorate of potash	1 teaspoonful
Glycerine	4 teaspoonfuls

Use as an injection, twice daily, in vaginal inflammation.

PRESCRIPTION XX.

Sulphate of zinc	20 grains
Water	1 pint

A stringent vaginal injection.

PRESCRIPTION XXI.

Tannic acid 2 drachms
Water 1 pint

Astringent vaginal injection.

PRESCRIPTION XXII.

Thymol 1 drachm
Glycerine 1 ounce
Alchol 8 ounces
Water, enough to make 1 pint

To be used as a disinfectant solution. When using as a vaginal injection, add 1 teaspoonful to every pint of water employed.

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APPENDIX.

PRESCRIPTION I.

Solution of citrate of ammonia . . 3 fluid ounces
Citrate of iron and quinine . . . 10 grains
Simple sirup 1 fluid ounce
Water 4 fluid ounces

Dose, two tablespoonfuls three times a day. For the
anæmia of pregnancy.

PRESCRIPTION II.

Iodide of iron 16 grains
Tincture of calumba 1 fluid ounce
Water 7 fluid ounces

Dose, two tablespoonfuls twice a day. For the anæmia
of pregnancy.

PRESCRIPTION III.

Fowler's solution 1 drachm
Tincture of chloride of iron . . . 4 drachms
Diluted muriatic acid 4 drachms
Sirup of lemons 3 fluid ounces
Water, enough to make 8 fluid ounces

Dose, dessertspoonful three times a day after meals. For
anæmia of pregnancy.

PRESCRIPTION IV.

Bitter wine of iron	7 fluid ounces
Tincture of nux vomica	4 fluid drachms
Fowler's solution	2 fluid drachms

Dose, dessertspoonful in a glassful of water, after each meal. For general anæmia.

PRESCRIPTION V.

Oxalate of copper	10 grains
Compound tragacanth powder	10 grains
Tincture of orange	30 drops
Water	1 fluid ounce

This amount for one dose, as required. For the nausea of pregnancy.

PRESCRIPTION VI.

Powdered calumba	4 drachms
“ senna	1 drachm
“ ginger	4 drachms
Boiling water	1 pint

Dose, a wineglassful three times a day. For the nausea of pregnancy.

PRESCRIPTION VII.

Oxalate of copper	10 grains
Subnitrate of bismuth	30 grains
Make into ten powders.	

Dose, one powder in water five or six times a day. For nausea of pregnancy.